MiTek USA, Inc.
16023 Swingley Ridge Rd
Chesterfield, MO 63017
314-434-1200

Re: 3022528
SUMMIT/HAWTHORN RIDGE #83/MO

The truss drawing(s) referenced below have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Builders FirstSource (Valley Center).

Pages or sheets covered by this seal: I49351361 thru I49351402

My license renewal date for the state of Missouri is December 31, 2021.

Missouri COA: Engineering 001193

December 21,2021

Sevier, Scott ,Engineer

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	A1	GABLE	1	1	I49351361
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:37:32 2021 Page 1
ID:sZNiC9?G94Kxezjx5JOhRWzDFsh-nv_DofFcdwKiN3INmXHRHllthmhpxmwySYoLjIy75cn

-0-10-8 22-3-14 29-3-5 32-3-8 33-6-0
0-10-8 22-3-14 6-11-6 3-0-3 1-2-8

Scale = 1:62.6

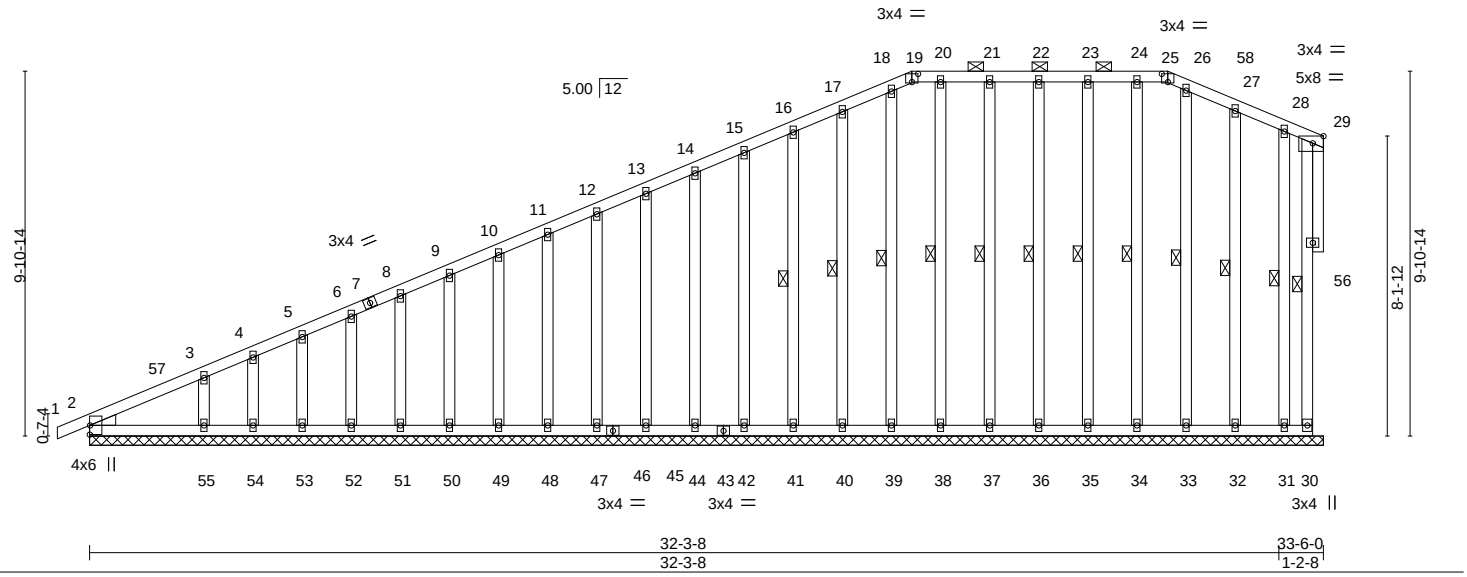

Plate Offsets (X,Y)-- [19:0-2-0,0-2-11], [25:0-2-0,0-2-11], [29:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	-0.01	30	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 265 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 19-25.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 29-30, 16-41, 17-40, 18-39, 20-38, 21-37, 22-36, 23-35, 24-34, 26-33, 27-32, 28-31

REACTIONS. All bearings 33-6-0.
(lb) - Max Horz 2=345(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 30, 44, 45, 47, 48, 49, 50, 51, 52, 53, 54, 42, 41, 40, 39, 38, 37, 36, 35, 34, 33, 32, 31 except 55=-110(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 30, 2, 44, 45, 47, 48, 49, 50, 51, 52, 53, 54, 42, 41, 40, 39, 38, 37, 36, 35, 34, 33, 32, 31 except 55=268(LC 25)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-425/241, 3-4=-343/195, 4-5=-325/195, 5-6=-297/184, 6-8=-270/175

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 22-3-14, Corner(3R) 22-3-14 to 25-3-14, Exterior(2N) 25-3-14 to 29-3-5, Corner(3R) 29-3-5 to 32-5-4, Exterior(2N) 32-5-4 to 33-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 1-4-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 30, 44, 45, 47, 48, 49, 50, 51, 52, 53, 54, 42, 41, 40, 39, 38, 37, 36, 35, 34, 33, 32, 31 except (jt=lb) 55=110.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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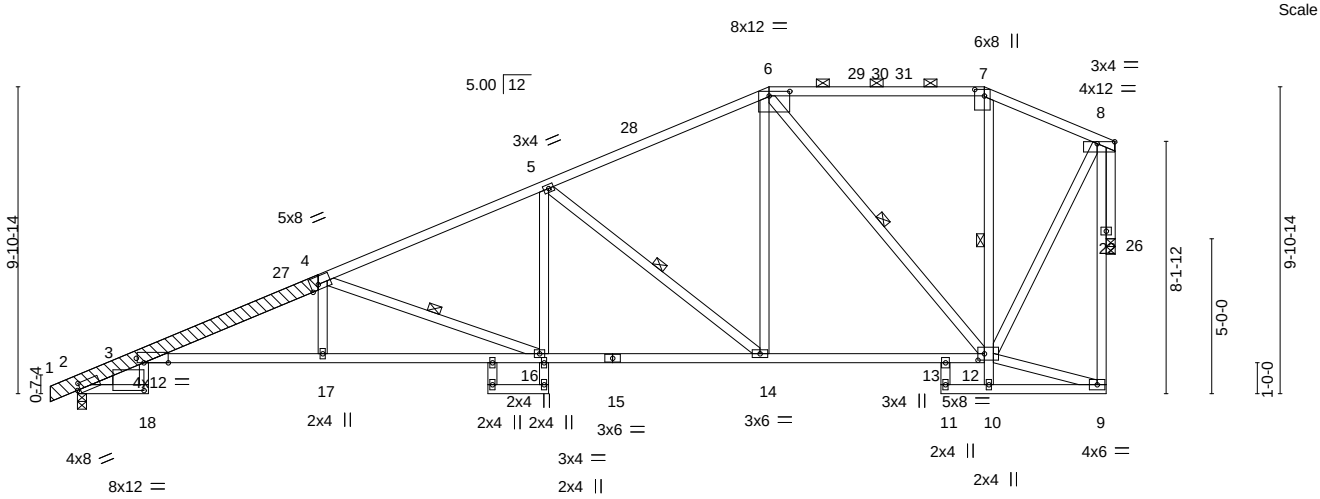
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	A2	Piggyback Base	2	1	I49351362
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:37:38 2021 Page 1
ID:sZNiC9?G94KxezjxJOhRWzDFsh-c3LU3iKMDm4r6_lW7oOrW0_q0BY1LLDqrUFgxyy75ch

-0-10-8	2-3-8	7-9-4	13-3-0	15-2-8	22-3-14	27-10-8	29-3-5	33-6-0
0-10-8	2-3-8	5-5-12	5-5-12	1-11-8	7-1-6	5-6-10	1-4-13	4-2-11

Scale = 1:74.4



2-3-8	7-9-4	13-3-0	15-2-8	22-3-14	27-10-8	29-3-5	33-6-0
2-3-8	5-5-12	5-5-12	1-11-8	7-1-6	5-6-10	1-4-13	4-2-11

Plate Offsets (X,Y)-- [2:0-1-3,0-2-7], [3:0-9-7,0-0-0], [3:0-3-0,1-0-8], [4:0-3-0,Edge], [6:0-8-0,0-1-12], [7:0-2-8,0-3-12], [8:0-6-12,0-0-12], [12:0-2-8,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	-0.34	3-17	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.62	3-17	>645	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.38	26	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 196 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 1-4: 2x6 SPF 2100F 1.8E
BOT CHORD	2x4 SPF No.2 *Except* 3-15: 2x4 SPF 1650F 1.5E
WEBS	2x4 SPF No.2
OTHERS	2x4 SPF No.2
LBR SCAB	1-4 2x6 SPF 2100F 1.8E one side
WEDGE	Left: 2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-10-4 max.): 6-7.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 6-12, 7-10, 5-14, 4-16

REACTIONS. (size) 2=0-3-8, 26=0-3-8
Max Horz 2=296(LC 9)
Max Uplift 2=-304(LC 12), 26=-261(LC 12)
Max Grav 2=1568(LC 1), 26=1474(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	3-24=-634/23, 3-4=-3904/804, 4-5=-2580/528, 5-6=-1550/347, 6-7=-657/187, 7-8=-724/180
BOT CHORD	3-17=-940/3680, 16-17=-938/3691, 14-16=-530/2290, 13-14=-326/1320, 12-13=-299/1404
WEBS	4-17=0/305, 6-14=-174/888, 6-12=-1076/303, 7-12=-251/133, 8-12=-243/1269, 5-14=-1213/375, 5-16=-80/626, 4-16=-1483/437, 8-26=-1480/270

NOTES-

1) Attached 9-6-11 scab 1 to 4, front face(s) 2x6 SPF 2100F 1.8E with 2 row(s) of 10d (0.131"x3") nails spaced 9" o.c.except : starting at 0-0-10 from end at joint 1, nail 2 row(s) at 4" o.c. for 4-0-10; starting at 7-4-13 from end at joint 1, nail 2 row(s) at 7" o.c. for 2-0-0.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 1-10-12, Interior(1) 1-10-12 to 22-3-14, Exterior(2R) 22-3-14 to 26-6-13, Interior(1) 26-6-13 to 29-3-5, Exterior(2E) 29-3-5 to 33-0-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) The Fabrication Tolerance at joint 7 = 4%
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Bearing at joint(s) 26 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=304, 26=261.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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Continued on page 2

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NOTES-

11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	A2A	Piggyback Base	1	1	I49351363
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:37:40 2021 Page 1
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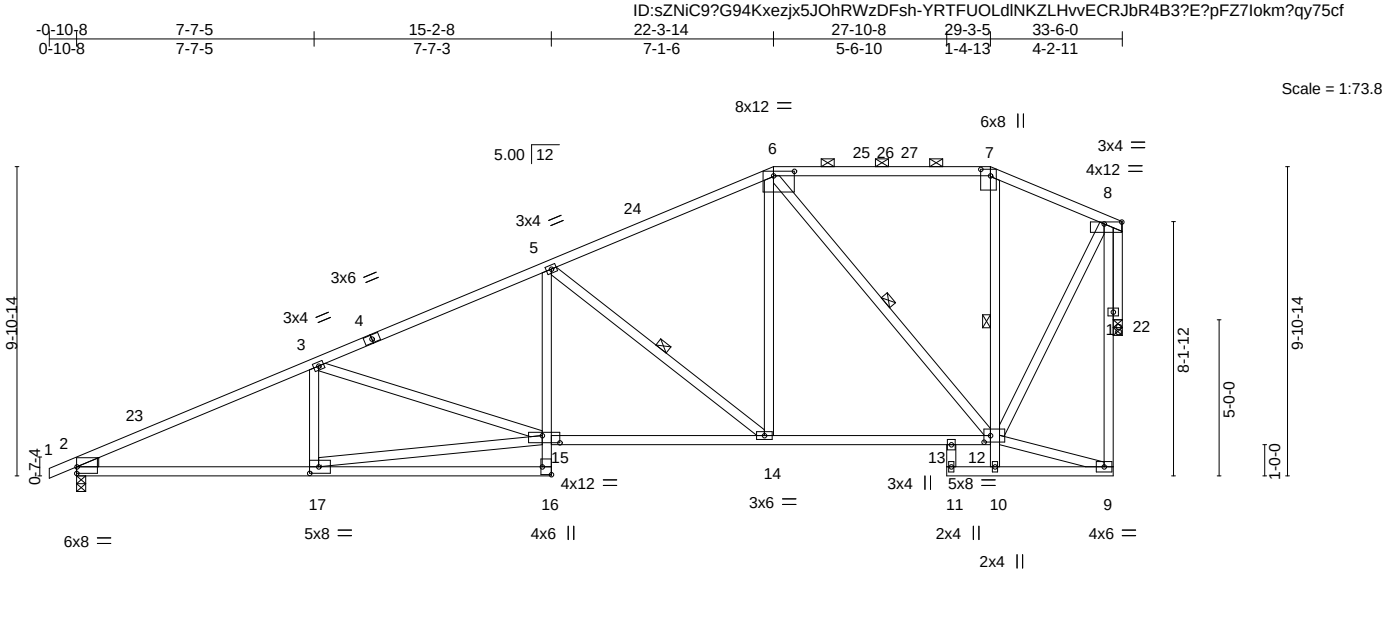

0-10-8	7-7-5	15-2-8	22-3-14	27-10-8	29-3-5	33-6-0
0-10-8	7-7-5	7-7-3	7-1-6	5-6-10	1-4-13	4-2-11

Plate Offsets (X,Y)-- [2:Edge,0-2-8], [6:0-8-0,0-1-12], [7:0-2-8,0-3-12], [8:0-6-12,0-0-12], [12:0-2-8,0-2-8], [15:0-6-12,0-2-12], [16:Edge,0-3-8], [17:0-3-8,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.63	Vert(LL)	-0.18	14-15	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.36	16-17	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.63	Horz(CT)	0.21	22	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 178 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-9-0 max.): 6-7.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-14, 7-10, 6-12

REACTIONS. (size) 2=0-3-8, 22=0-3-8
Max Horz 2=294(LC 9)
Max Uplift 2=-306(LC 12), 22=-261(LC 12)
Max Grav 2=1563(LC 1), 22=1474(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2926/552, 3-5=-2557/527, 5-6=-1554/347, 6-7=-655/187, 7-8=-722/180
BOT CHORD 2-17=-673/2609, 5-15=-79/588, 14-15=-535/2289, 13-14=-326/1321, 12-13=-300/1392
WEBS 15-17=-643/2434, 3-15=-362/155, 5-14=-1209/381, 6-14=-176/900, 7-12=-252/133, 8-12=-244/1266, 6-12=-1081/302, 8-22=-1480/270

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 22-3-14, Exterior(2R) 22-3-14 to 26-6-13, Interior(1) 26-6-13 to 29-3-5, Exterior(2E) 29-3-5 to 33-0-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) The Fabrication Tolerance at joint 7 = 4%
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Bearing at joint(s) 22 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=306, 22=261.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	A3	Piggyback Base	2	1	I49351364
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:37:41 2021 Page 1
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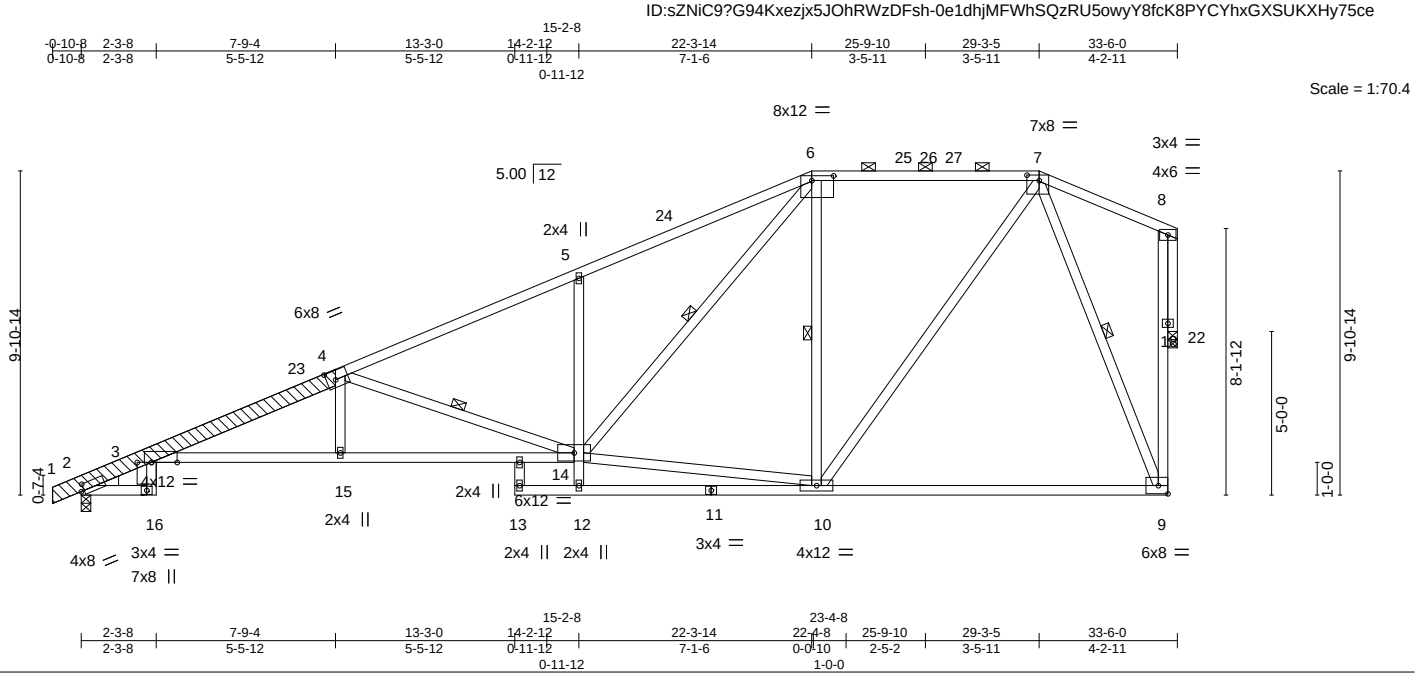

Plate Offsets (X,Y)-- [2:0-1-3,0-2-7], [3:0-9-7,0-0-0], [3:0-0-0,0-5-3], [4:0-3-4,0-3-4], [6:0-8-0,0-1-12], [7:0-4-8,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.35	3-15	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.69	9-10	>581	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.36	22	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 195 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 1-4: 2x6 SPF 2100F 1.8E
BOT CHORD	2x4 SPF No.2 *Except* 3-14: 2x4 SPF 1650F 1.5E
WEBS	2x4 SPF No.2
OTHERS	2x4 SPF No.2
LBR SCAB	1-4 2x6 SPF 2100F 1.8E one side
WEDGE	
Left: 2x4 SP No.3	

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-0-10 max.): 6-7.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 4-14, 6-10, 6-14, 7-9

REACTIONS. (size) 2=0-3-8, 22=0-3-8
Max Horz 2=296(LC 9)
Max Uplift 2=-295(LC 12), 22=-254(LC 12)
Max Grav 2=1588(LC 1), 22=1490(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	3-20=-643/19, 3-4=-3989/774, 4-5=-2621/508, 5-6=-2622/651, 6-7=-1192/318, 9-18=-262/1393, 8-18=-262/1393
BOT CHORD	3-15=-913/3761, 14-15=-910/3773, 9-10=-178/573
WEBS	4-15=0/349, 4-14=-1534/430, 5-14=-516/274, 6-10=-851/317, 7-10=-255/1101, 10-14=-274/1149, 6-14=-491/1730, 7-9=-1387/319, 8-22=-1496/263

NOTES-

1) Attached 9-6-11 scab 1 to 4, front face(s) 2x6 SPF 2100F 1.8E with 2 row(s) of 10d (0.131"x3") nails spaced 9" o.c.except : starting at 0-0-10 from end at joint 1, nail 2 row(s) at 4" o.c. for 4-0-10; starting at 7-4-13 from end at joint 1, nail 2 row(s) at 7" o.c. for 2-0-0.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 1-10-12, Interior(1) 1-10-12 to 22-3-14, Exterior(2R) 22-3-14 to 26-6-13, Interior(1) 26-6-13 to 29-3-5, Exterior(2E) 29-3-5 to 33-0-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Bearing at joint(s) 22 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=295, 22=254.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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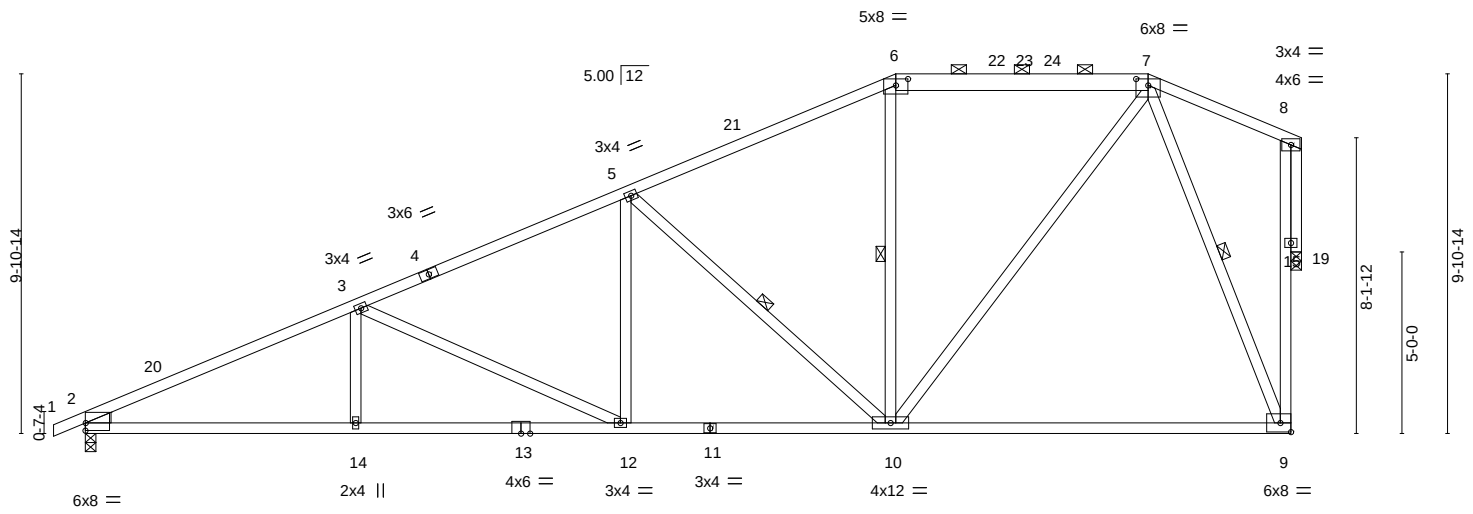
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	A4	Piggyback Base	1	1	I49351365
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:37:42 2021 Page 1
ID:sZNiC9?G94Kxezjx5JOhRWzDFsh-Uqb?v3NtH?aHab3IMdTnhs9V_owKH5wQm6Dt4jy75cd

-0-10-8	7-5-6	14-10-10	22-3-14	29-3-5	33-6-0
0-10-8	7-5-6	7-5-4	7-5-4	6-11-6	4-2-11

Scale: 3/16"=1'



7-5-6	14-10-10	22-3-14	29-3-5	33-6-0
7-5-6	7-5-4	7-5-4	6-11-6	4-2-11

Plate Offsets (X,Y)-- [2:Edge,0-2-8], [6:0-4-0,0-2-2], [7:0-4-0,0-2-2]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.37	9-10	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.75	9-10	>534	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.19	19	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 163 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except* 6-7: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-7.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-10, 6-10, 7-9

REACTIONS. (size) 2=0-3-8, 19=0-3-8
Max Horz 2=294(LC 9)
Max Uplift 2=-306(LC 12), 19=-261(LC 12)
Max Grav 2=1563(LC 1), 19=1474(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2933/554, 3-5=-2224/446, 5-6=-1413/317, 6-7=-1205/337, 9-15=-266/1361, 8-15=-266/1361
BOT CHORD 2-14=-676/2616, 12-14=-676/2616, 10-12=-457/1968, 9-10=-181/562
WEBS 3-14=0/276, 3-12=-715/244, 5-12=-47/467, 5-10=-1023/337, 7-10=-275/1107, 7-9=-1347/327, 8-19=-1481/270

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 22-3-14, Exterior(2R) 22-3-14 to 26-6-13, Interior(1) 26-6-13 to 29-3-5, Exterior(2E) 29-3-5 to 33-0-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Bearing at joint(s) 19 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=306, 19=261.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

December 21,2021

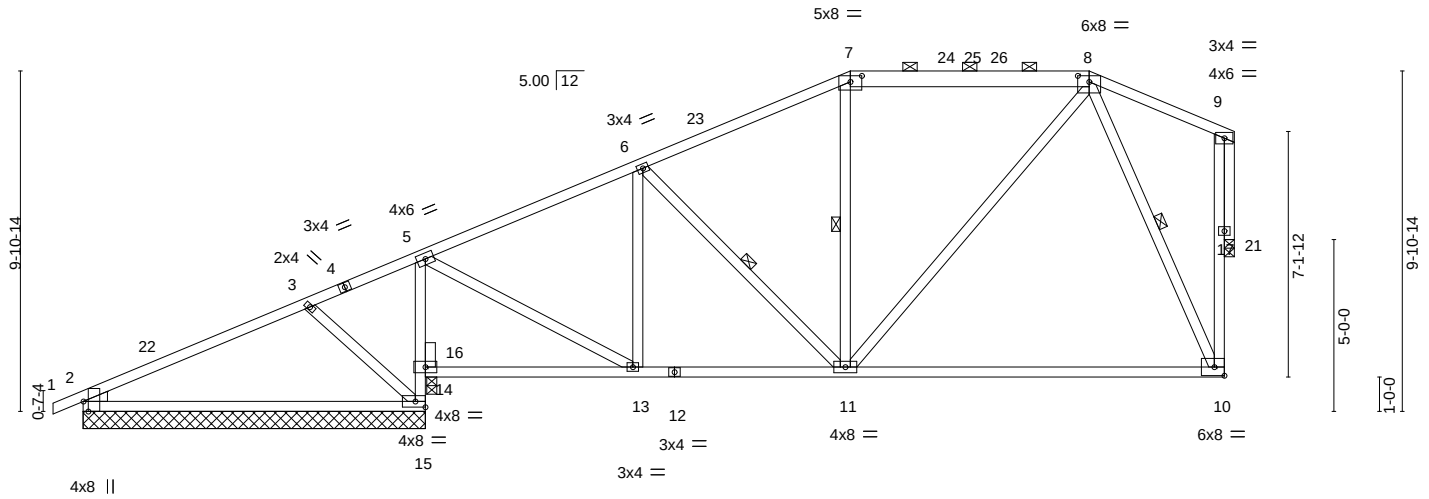
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	A5	Piggyback Base	1	1	I49351366
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:37:43 2021 Page 1
ID:sZNiC9?G94Kxezjx5JOhRWzDFsh-y08N6POV2li8CleUwL_0D4ih8CHg0gNZ_mzQc9y75cc

-0-10-8 4-11-13 6-7-3 9-11-8 16-1-11 22-3-14 29-3-5 33-6-0
0-10-8 4-11-13 1-7-6 3-4-5 6-2-3 6-2-3 6-11-6 4-2-11

Scale = 1:67.0



9-11-8 10-0-0 16-1-11 22-3-14 29-3-5 33-6-0
9-11-8 0-0-8 6-1-11 6-2-3 6-11-6 4-2-11

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [7:0-4-0,0-2-2], [8:0-4-0,0-2-2]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.35	10-11	>803	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.70	10-11	>401	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.37	Horz(CT)	-0.10	21	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 162 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except* 7-8: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-8.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 6-11, 7-11, 8-10

REACTIONS. All bearings 9-11-8 except (jt=length) 21=0-3-8.
(lb) - Max Horz 2=279(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 2, 15 except 14=-271(LC 12), 21=-161(LC 8)
Max Grav All reactions 250 lb or less at joint(s) except 2=546(LC 25), 14=1057(LC 1), 14=1057(LC 1), 15=386(LC 1), 2=544(LC 1), 21=1049(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-535/34, 3-5=-294/0, 5-6=-1062/167, 6-7=-939/200, 7-8=-788/218, 10-17=-163/926, 9-17=-163/926
BOT CHORD 2-15=-166/454, 5-14=-988/298, 13-14=-42/252, 11-13=-215/905, 10-11=-137/425
WEBS 5-13=-201/818, 6-13=-292/133, 8-11=-139/605, 8-10=-895/221, 3-15=-422/190, 9-21=-1054/186

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 22-3-14, Exterior(2R) 22-3-14 to 26-6-13, Interior(1) 26-6-13 to 29-3-5, Exterior(2E) 29-3-5 to 33-0-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss is not designed to support a ceiling and is not intended for use where aesthetics are a consideration.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Bearing at joint(s) 14, 21 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 15, 2 except (jt=lb) 14=271, 21=161.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

December 21,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	A6	Piggyback Base	3	1	I49351367
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:37:44 2021 Page 1
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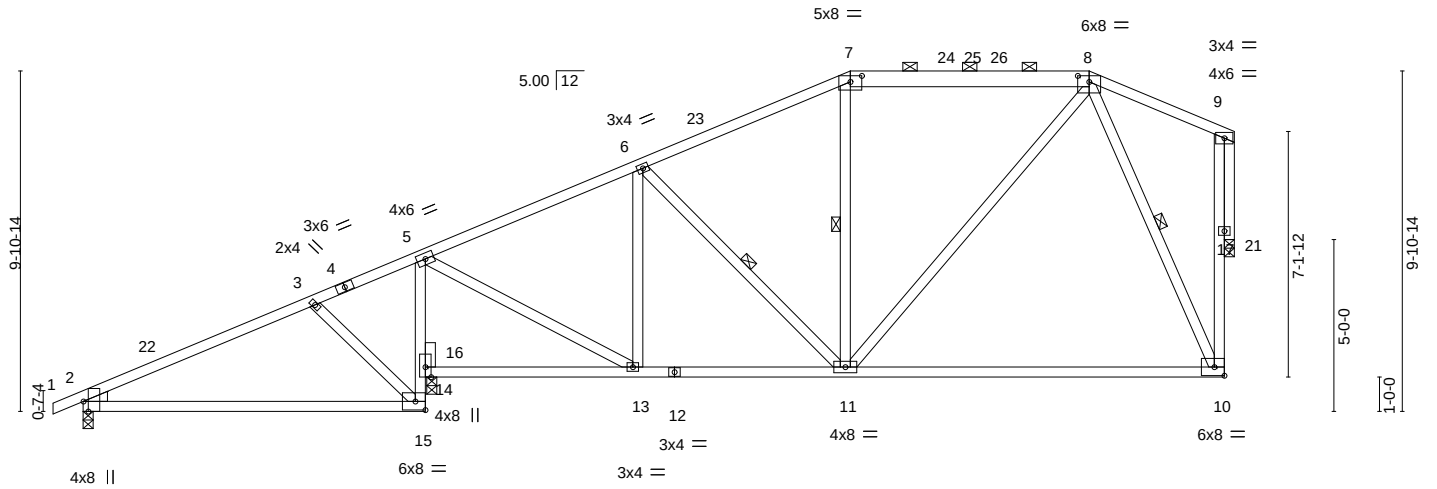
-0-10-8 4-11-13 6-8-15 9-11-8 16-1-11 22-3-14 29-3-5 33-6-0
0-10-8 4-11-13 1-9-2 3-2-9 6-2-3 6-2-3 6-11-6 4-2-11

Scale = 1:67.0



4-11-13 9-11-8 10-0-0 16-1-11 22-3-14 29-3-5 33-6-0
4-11-13 4-11-11 0-0-8 6-1-11 6-2-3 6-11-6 4-2-11

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [7:0-4-0,0-2-2], [8:0-4-0,0-2-2]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.35	10-11	>803	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.70	10-11	>401	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.37	Horz(CT)	-0.10	21	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 162 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except* 7-8: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-8.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 6-11, 7-11, 8-10

REACTIONS. (size) 2=0-3-8, 14=0-3-8, 21=0-3-8
Max Horz 2=279(LC 12)
Max Uplift 2=-46(LC 12), 14=-367(LC 12), 21=-162(LC 8)
Max Grav 2=550(LC 25), 14=1437(LC 1), 21=1051(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-537/35, 3-5=-300/0, 5-6=-1067/169, 6-7=-942/200, 7-8=-790/219, 10-17=-164/928, 9-17=-164/928
BOT CHORD 2-15=-166/454, 14-15=-104/398, 5-14=-969/290, 13-14=-47/258, 11-13=-217/911, 10-11=-138/425
WEBS 5-13=-199/811, 6-13=-288/132, 8-11=-140/607, 8-10=-897/222, 3-15=-423/191, 9-21=-1056/187

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 22-3-14, Exterior(2R) 22-3-14 to 26-6-13, Interior(1) 26-6-13 to 29-3-5, Exterior(2E) 29-3-5 to 33-0-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Bearing at joint(s) 21 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 14=367, 21=162.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

December 21,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	A7	Piggyback Base	4	1	I49351368
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:37:45 2021 Page 1
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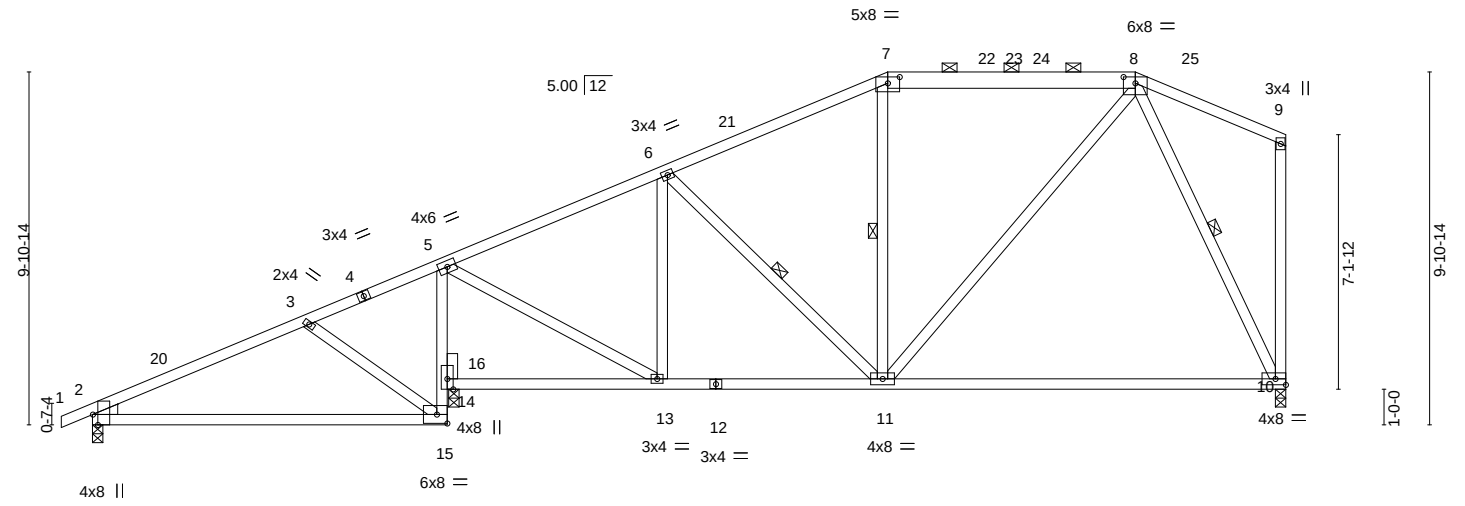
-0-10-8	4-11-13	6-1-0	9-11-8	16-1-11	22-3-14	29-3-5	33-6-0
0-10-8	4-11-13	1-1-3	3-10-8	6-2-3	6-2-3	6-11-6	4-2-11

Scale = 1:64.7



4-11-13	6-1-0	9-11-8	10-0-0	16-1-11	22-3-14	29-3-5	33-6-0
4-11-13	1-1-3	3-10-8	0-0-8	6-1-11	6-2-3	6-11-6	4-2-11

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [7:0-4-0,0-2-2], [8:0-4-0,0-2-2]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	-0.40	10-11	>701	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.81	10-11	>349	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.02	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 160 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except* 7-8: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-8.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 7-11, 8-10, 6-11

REACTIONS. (size) 2=0-3-8, 14=0-3-8, 10=0-3-8
Max Horz 2=324(LC 9)
Max Uplift 2=-60(LC 12), 14=-365(LC 12), 10=-162(LC 9)
Max Grav 2=535(LC 25), 14=1457(LC 1), 10=1071(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-580/113, 3-5=-343/68, 5-6=-1043/221, 6-7=-939/250, 7-8=-787/259
BOT CHORD 2-15=-149/466, 14-15=-78/349, 5-14=-1039/313, 11-13=-233/890, 10-11=-162/419
WEBS 8-11=-127/611, 8-10=-924/256, 3-15=-428/188, 6-13=-313/142, 5-13=-218/838

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 22-3-14, Exterior(2R) 22-3-14 to 26-6-13, Interior(1) 26-6-13 to 29-3-5, Exterior(2E) 29-3-5 to 33-4-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 14=365, 10=162.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

December 21,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	A8	Piggyback Base	2	1	I49351369
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:37:46 2021 Page 1
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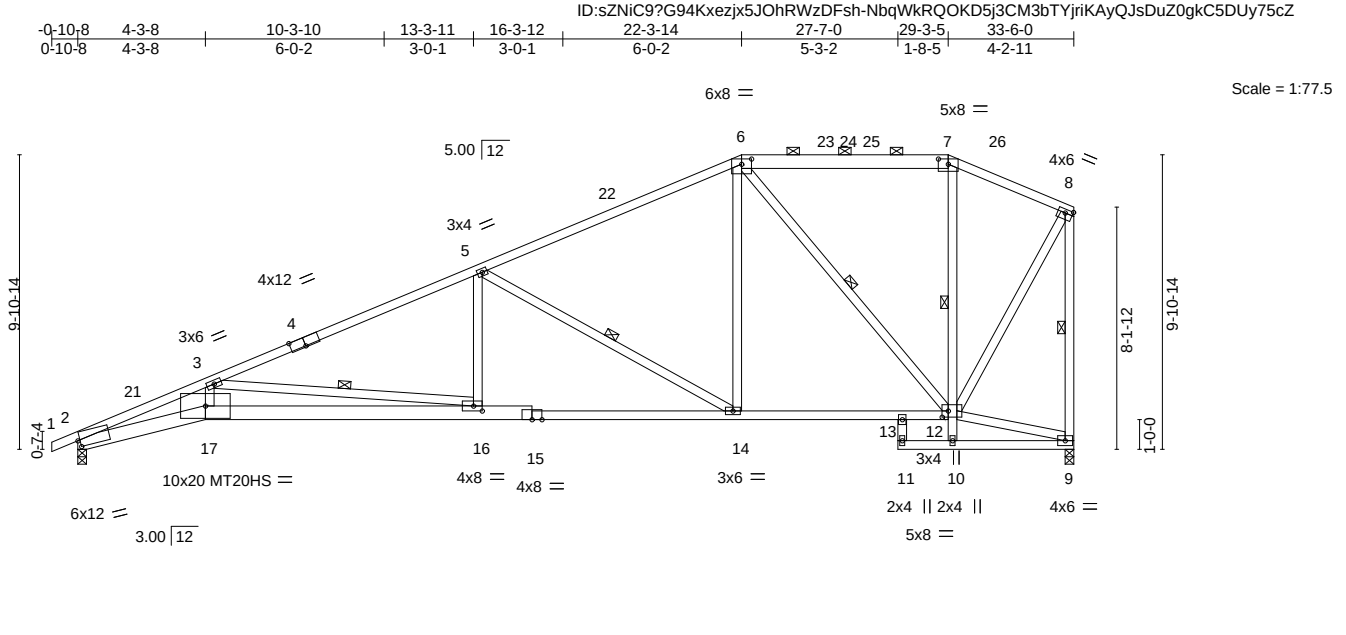

Plate Offsets (X,Y)-- [2:0-0-15,0-2-10], [4:0-6-0,Edge], [6:0-4-0,0-2-2], [7:0-4-0,0-2-2], [8:0-3-0,0-1-8], [12:0-2-8,0-2-8], [16:0-3-8,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.39	16-17	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.72	16-17	>553	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.28	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 179 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E *Except* 6-7: 2x6 SPF No.2, 7-8: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except* 2-17,15-17: 2x6 SPF 2100F 1.8E
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-7.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 7-10, 8-9, 6-12, 5-14, 3-16

REACTIONS. (size) 2=0-3-8, 9=0-3-8
Max Horz 2=344(LC 11)
Max Uplift 2=-318(LC 12), 9=-249(LC 12)
Max Grav 2=1563(LC 1), 9=1500(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-5599/1268, 3-5=-2939/607, 5-6=-1582/368, 6-7=-653/241, 7-8=-751/243, 8-9=-1482/305
BOT CHORD 2-17=-1328/5183, 16-17=-1287/4983, 14-16=-629/2644, 13-14=-358/1323, 12-13=-335/1400
WEBS 3-17=-169/948, 6-14=-148/848, 8-12=-274/1270, 6-12=-1089/294, 5-14=-1498/443, 5-16=-19/641, 3-16=-2357/713

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 22-3-14, Exterior(2R) 22-3-14 to 26-6-13, Interior(1) 26-6-13 to 29-3-5, Exterior(2E) 29-3-5 to 33-4-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=318, 9=249.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

December 21,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	A9	Piggyback Base	2	1	I49351370
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:37:47 2021 Page 1
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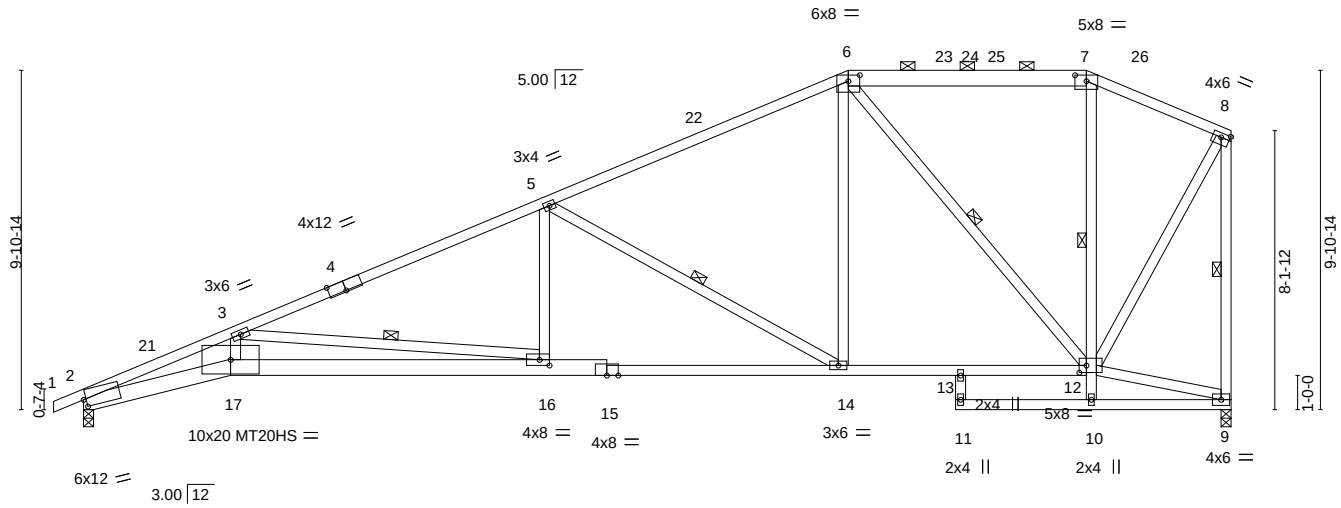
0-10-8 4-3-8 6-0-2 3-0-1 3-0-1 6-0-2 3-1-10 3-9-13 4-2-11

Scale = 1:67.3



4-3-8 13-3-11 22-3-14 25-5-8 29-3-5 33-6-0
4-3-8 9-0-3 9-0-3 3-1-10 3-9-13 4-2-11

Plate Offsets (X,Y)-- [2:0-0-15,0-2-10], [4:0-6-0,Edge], [6:0-4-0,0-2-2], [7:0-4-0,0-2-2], [8:0-3-0,0-1-8], [12:0-2-8,0-2-8], [16:0-3-8,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.39	16-17	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.73	16-17	>552	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.28	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 181 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E *Except* 6-7: 2x6 SPF No.2, 7-8: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except* 2-17,15-17: 2x6 SPF 2100F 1.8E
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-7.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 7-10, 8-9, 6-12, 5-14, 3-16

REACTIONS. (size) 2=0-3-8, 9=0-3-8
Max Horz 2=344(LC 11)
Max Uplift 2=-318(LC 12), 9=-249(LC 12)
Max Grav 2=1563(LC 1), 9=1500(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-5601/1267, 3-5=-2936/608, 5-6=-1584/367, 6-7=-640/246, 7-8=-737/249, 8-9=-1455/305
BOT CHORD 2-17=-1327/5185, 16-17=-1287/4985, 14-16=-629/2642, 13-14=-358/1324, 12-13=-338/1278
WEBS 3-17=-168/951, 6-14=-143/868, 8-12=-273/1244, 6-12=-1112/288, 5-14=-1493/444, 5-16=-20/635, 3-16=-2361/712

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 22-3-14, Exterior(2R) 22-3-14 to 26-6-13, Interior(1) 26-6-13 to 29-3-5, Exterior(2E) 29-3-5 to 33-4-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=318, 9=249.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

December 21,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	A10	Piggyback Base	1	1	I49351371
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:37:34 2021 Page 1
ID:sZNiC9?G94KxezjxJOhRWzDFsh-jH6_DKHs9XaPdMRluyKvMAq4yaDHPTqFwsHSoBy75cl

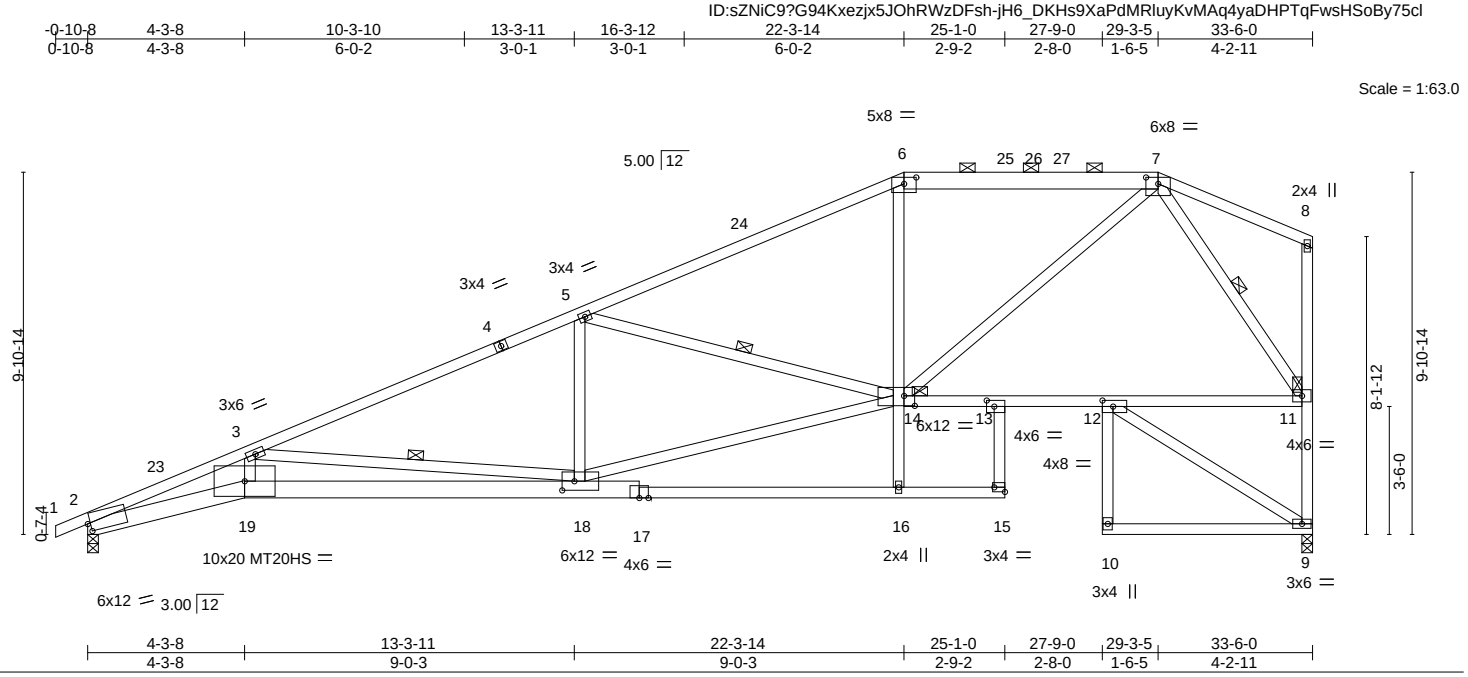


Plate Offsets (X,Y)-- [2:0-0-15,0-2-10], [6:0-4-0,0-2-2], [7:0-4-0,0-2-2], [12:0-3-8,0-2-0], [13:0-2-8,0-2-0], [14:0-3-8,0-3-4], [15:Edge,0-1-8], [18:0-4-0,0-3-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.93	Vert(LL)	-0.38	18-19	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.70	18-19	>569	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.43	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 190 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except*
	6-7: 2x6 SPF No.2, 1-4: 2x4 SPF 1650F 1.5E
BOT CHORD	2x4 SPF No.2 *Except*
	2-19,17-19: 2x6 SPF 2100F 1.8E
WEBS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-11-8 max.): 6-7.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 8-9, 7-11, 3-18, 5-14
JOINTS	1 Brace at Jt(s): 14

REACTIONS. (size) 2=0-3-8, 9=0-3-8
Max Horz 2=344(LC 11)
Max Uplift 2=-318(LC 12), 9=-249(LC 12)
Max Grav 2=1563(LC 1), 9=1500(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-5576/1259, 3-5=-2962/617, 5-6=-2183/422, 6-7=-1897/440, 9-11=-1425/321
BOT CHORD 2-19=-1319/5161, 18-19=-1281/4967, 13-14=-272/932, 12-13=-306/879, 11-12=-286/886
WEBS 3-19=-160/923, 14-16=0/382, 6-14=0/398, 7-11=-1516/355, 7-14=-285/1387, 3-18=-2319/698, 14-18=-630/2792, 5-14=-809/357

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 22-3-14, Exterior(2R) 22-3-14 to 26-6-13, Interior(1) 26-6-13 to 29-3-5, Exterior(2E) 29-3-5 to 33-4-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=318, 9=249.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

December 21,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	A11	GABLE	1	1	I49351372
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:37:37 2021 Page 1
ID:sZNiC9?G94KxezjxJOhRWzDFsh-8sn6sMJkSSy_UqAKZ4tc_pSkInOhc0AhcqW6OWy75ci

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0-10-8 22-3-14 6-11-6 3-11-3

Scale = 1:62.4

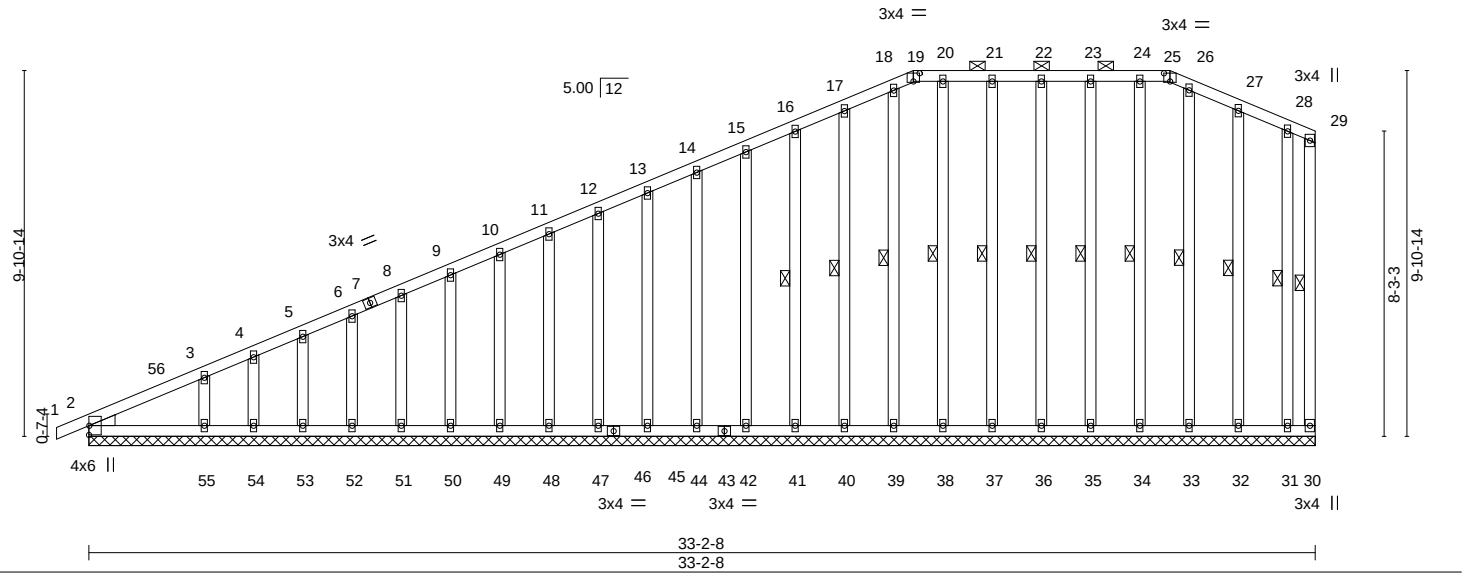

Plate Offsets (X,Y)-- [19:0-2-0,0-2-11], [25:0-2-0,0-2-11]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	-0.01	30	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 262 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 19-25.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 29-30, 16-41, 17-40, 18-39, 20-38, 21-37, 22-36, 23-35, 24-34, 26-33, 27-32, 28-31

REACTIONS. All bearings 33-2-8.
(lb) - Max Horz 2=348(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 30, 44, 45, 47, 48, 49, 50, 51, 52, 53, 54, 42, 41, 40, 39, 38, 37, 36, 35, 34, 33, 32 except 55=-111(LC 12), 31=-101(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 30, 2, 44, 45, 47, 48, 49, 50, 51, 52, 53, 54, 42, 41, 40, 39, 38, 37, 36, 35, 34, 33, 32, 31 except 55=270(LC 25)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-424/241, 3-4=-341/194, 4-5=-324/195, 5-6=-296/184, 6-8=-269/175

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 22-3-14, Corner(3R) 22-3-14 to 25-3-14, Exterior(2N) 25-3-14 to 29-3-5, Corner(3R) 29-3-5 to 32-5-8, Exterior(2N) 32-5-8 to 33-0-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 1-4-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 30, 44, 45, 47, 48, 49, 50, 51, 52, 53, 54, 42, 41, 40, 39, 38, 37, 36, 35, 34, 33, 32 except (jt=lb) 55=111, 31=101.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

December 21,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	B1	GABLE	1	1	I49351373
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:37:50 2021 Page 1
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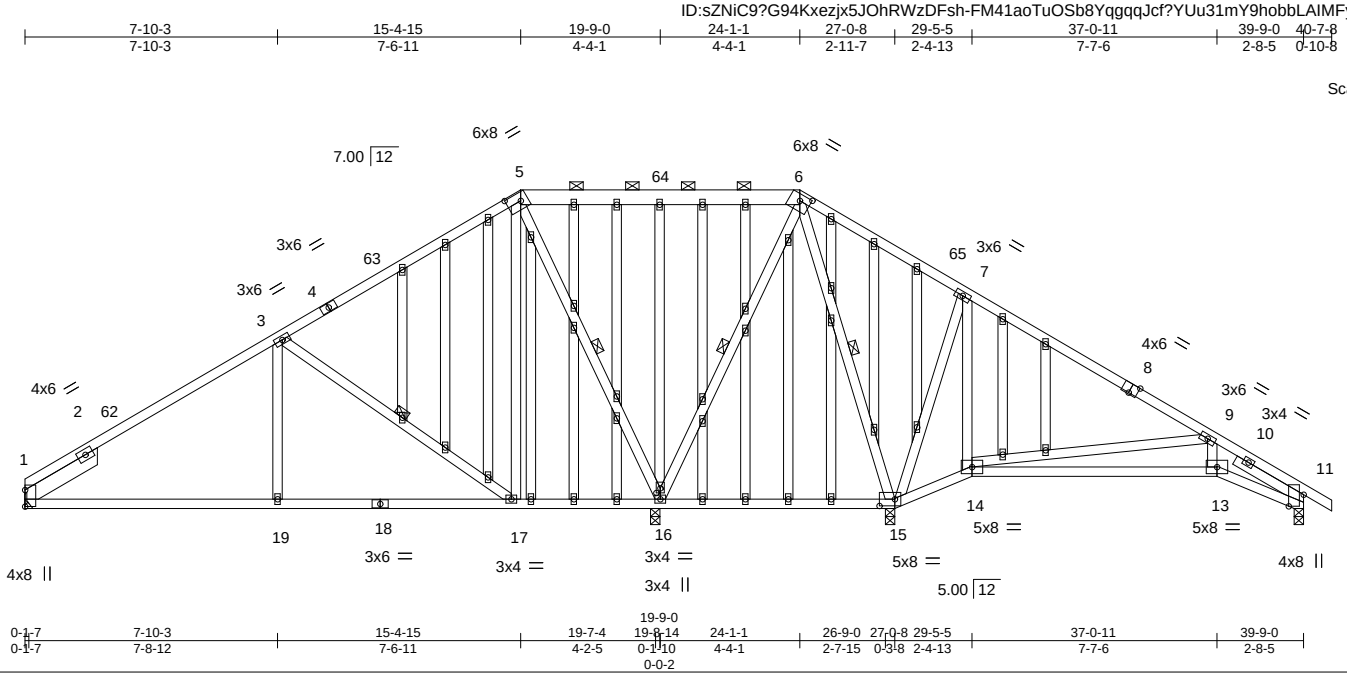


Plate Offsets (X,Y)-- [1:Edge,0-0-0], [5:0-5-4,0-3-0], [6:0-4-0,0-2-6], [8:0-3-0,Edge], [11:0-4-5,Edge], [15:0-5-12,0-2-8], [16:0-1-12,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	-0.11	13-14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.23	13-14	>677	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.97	Horz(CT)	-0.04	15	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 321 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 5-6: 2x6 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
OTHERS	2x4 SPF No.2
SLIDER	Left 2x6 SPF No.2 2-9-0, Right 2x4 SPF No.2 2-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (10-0-0 max.): 5-6.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 3-17, 5-16, 6-16, 6-15

REACTIONS. All bearings 0-3-8 except (jt=length) 1=Mechanical.
(lb) - Max Horz 11=-247(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 11, 16 except 1=-232(LC 12), 15=-488(LC 13)
Max Grav All reactions 250 lb or less at joint(s) except 1=792(LC 25), 15=1423(LC 26), 11=311(LC 26), 16=1263(LC 25)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	1-3=-912/348, 3-5=-369/305, 5-6=-26/415, 6-7=-122/756, 7-9=-204/653, 9-11=-560/116
BOT CHORD	1-19=-187/755, 17-19=-187/755, 15-16=-326/145, 14-15=-405/163, 13-14=-247/602, 11-13=-255/688
WEBS	3-19=0/325, 3-17=-720/276, 5-17=-107/511, 7-15=-558/229, 9-14=-940/399, 9-13=-22/371, 5-16=-1106/197, 6-15=-746/261

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 15-4-15, Exterior(2R) 15-4-15 to 19-7-13 , Interior(1) 19-7-13 to 24-1-1, Exterior(2R) 24-1-1 to 28-4-0, Interior(1) 28-4-0 to 40-7-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable studs spaced at 1-4-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Refer to girder(s) for truss to truss connections.
9) Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 16 except (jt=lb) 1=232, 15=488.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

December 21,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

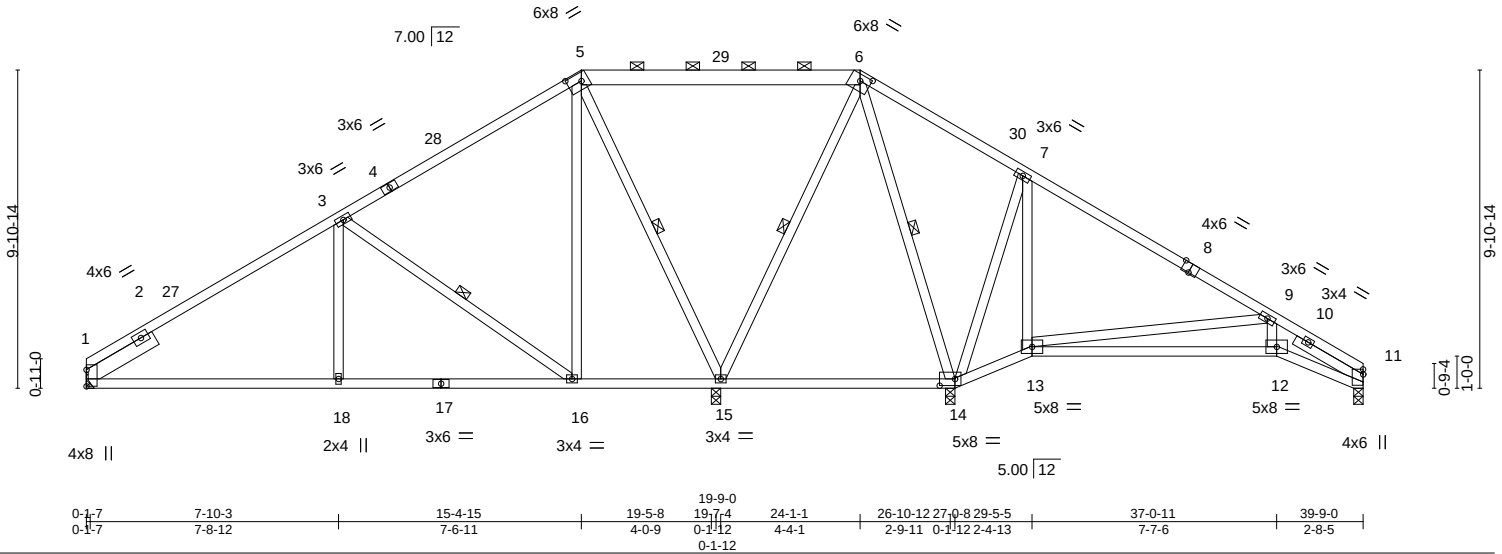
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	B3	Piggyback Base	3	1	I49351374
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:37:51 2021 Page 1
ID:sZNiC9?G94Kxezjx5JOhRWzDFsh-jZdPo8UW9mj?9zF0O07uYm13pR6nu96lq?vsuiy75cU

7-10-3	15-4-15	19-9-0	24-1-1	27-0-8	29-5-5	37-0-11	39-9-0
7-10-3	7-6-11	4-4-1	4-4-1	2-11-7	2-4-13	7-7-6	2-8-5

Scale = 1:71.7



0-1-7	7-10-3	15-4-15	19-5-8	19-9-0 / 19-7-4	24-1-1	26-10-12	27-0-8	29-5-5	37-0-11	39-9-0
0-1-7	7-8-12	7-6-11	4-0-9	0-1-12 / 0-1-12	4-4-1	2-9-11	0-1-12	2-4-13	7-7-6	2-8-5

Plate Offsets (X,Y)-- [1:Edge,0-0-0], [5:0-5-4,0-3-0], [6:0-4-0,0-2-6], [8:0-3-0,Edge], [11:0-1-15,0-0-1], [14:0-5-12,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	-0.11	12-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.23	12-13	>677	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.03	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 194 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 5-6: 2x6 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
SLIDER	Left 2x6 SPF No.2 2-6-0, Right 2x4 SPF No.2 2-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (10-0-0 max.): 5-6.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 3-16, 5-15, 6-15, 6-14

REACTIONS. All bearings 0-3-8 except (jt=length) 1=Mechanical.
(lb) - Max Horz 15=-238(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 11, 15 except 1=-210(LC 12), 14=-391(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 11 except 1=789(LC 25), 14=1427(LC 26), 15=1272(LC 25)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	1-3=-905/309, 3-5=-363/263, 5-6=0/384, 6-7=0/700, 7-9=-113/569, 9-11=-577/101
BOT CHORD	1-18=-154/750, 16-18=-154/750, 14-15=-428/244, 13-14=-467/256, 12-13=-80/507, 11-12=-67/579
WEBS	3-18=0/325, 3-16=-724/280, 5-16=-109/514, 7-14=-512/186, 9-13=-867/319, 9-12=0/374, 5-15=-1109/222, 6-14=-749/165

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 15-4-15, Exterior(2R) 15-4-15 to 19-7-13 , Interior(1) 19-7-13 to 24-1-1, Exterior(2R) 24-1-1 to 28-4-0, Interior(1) 28-4-0 to 39-9-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 15 except (jt=lb) 1=210, 14=391.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

December 21,2021

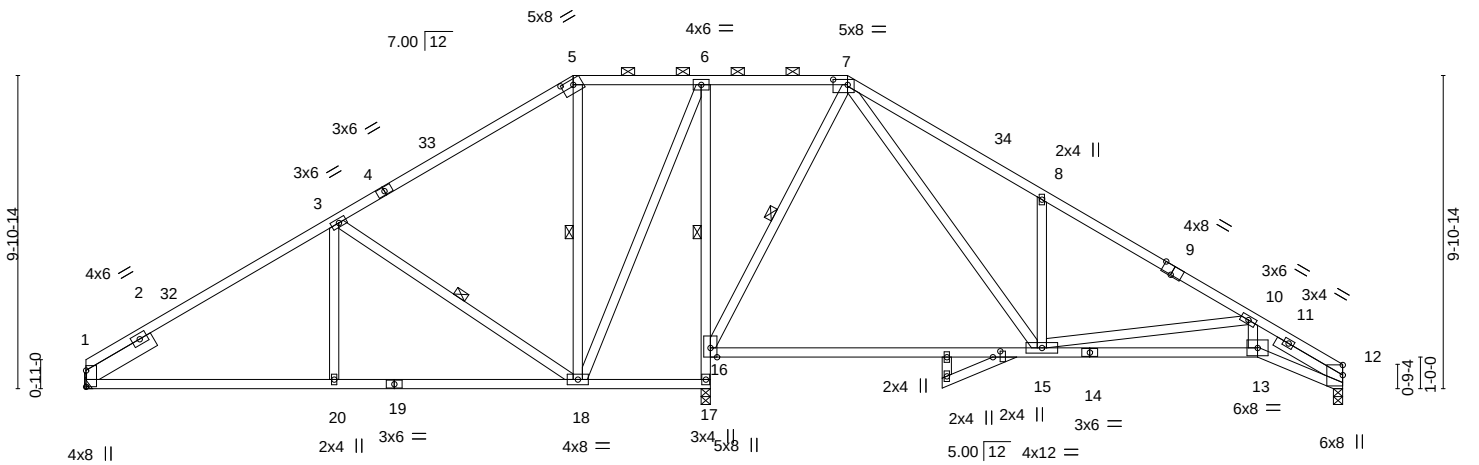
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	B4	Piggyback Base	2	1	I49351375
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:37:52 2021 Page 1
ID:sZNiC9?G94Kxezjx5JOhRWzDFsh-ClBn?UV8w3rsn7qDxke75zaFOqKKdb6u3ffPQ8y75cT

7-10-3	15-4-15	19-9-0	24-1-1	27-1-0	29-5-5	30-4-9	37-0-11	39-9-0
7-10-3	7-6-11	4-4-1	4-4-1	2-11-15	2-4-5	0-11-4	6-8-2	2-8-5

Scale = 1:72.9



0-1-0	7-10-3	15-4-15	19-5-8	19-9-0	24-1-1	27-1-0	29-5-5	30-4-9	37-0-11	39-9-0
0-1-0	7-9-4	7-6-11	4-0-9	0-3-8	4-4-1	2-11-15	2-4-5	0-11-4	6-8-2	2-8-5

Plate Offsets (X,Y)-- [1:Edge,0-0-0], [5:0-4-8,0-2-0], [7:0-5-8,0-2-0], [9:0-4-0,Edge], [23:0-2-4,0-2-13]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	-0.42	15-16	>580	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.84	15-16	>287	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.98	Horz(CT)	-0.02	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 193 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x6 SPF No.2 2-6-0, Right 2x4 SPF No.2 2-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (6-0-0 max.): 5-7.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 6-17, 3-18, 5-18, 7-16

REACTIONS. (size) 1=Mechanical, 17=0-3-8, 12=0-3-8
Max Horz 17=-239(LC 8)
Max Uplift 1=-203(LC 12), 17=-181(LC 12), 12=-259(LC 13)
Max Grav 1=847(LC 25), 17=1913(LC 1), 12=846(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1011/299, 3-5=-452/286, 5-6=-260/276, 6-7=-84/303, 7-8=-1179/603, 8-10=-1111/414, 10-12=-2258/747
BOT CHORD 1-20=-147/841, 18-20=-147/841, 17-18=-253/189, 13-15=-561/1777, 12-13=-609/1960
WEBS 16-17=-1889/188, 6-16=-1079/226, 3-20=0/319, 3-18=-737/291, 5-18=-266/87, 10-13=-151/655, 8-15=-542/310, 10-15=-901/365, 6-18=-176/852, 7-16=-819/149, 7-15=-343/1135

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 15-4-15, Exterior(2R) 15-4-15 to 19-7-4, Interior(1) 19-7-4 to 24-1-1, Exterior(2R) 24-1-1 to 28-4-0, Interior(1) 28-4-0 to 39-9-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=203, 17=181, 12=259.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

December 21,2021

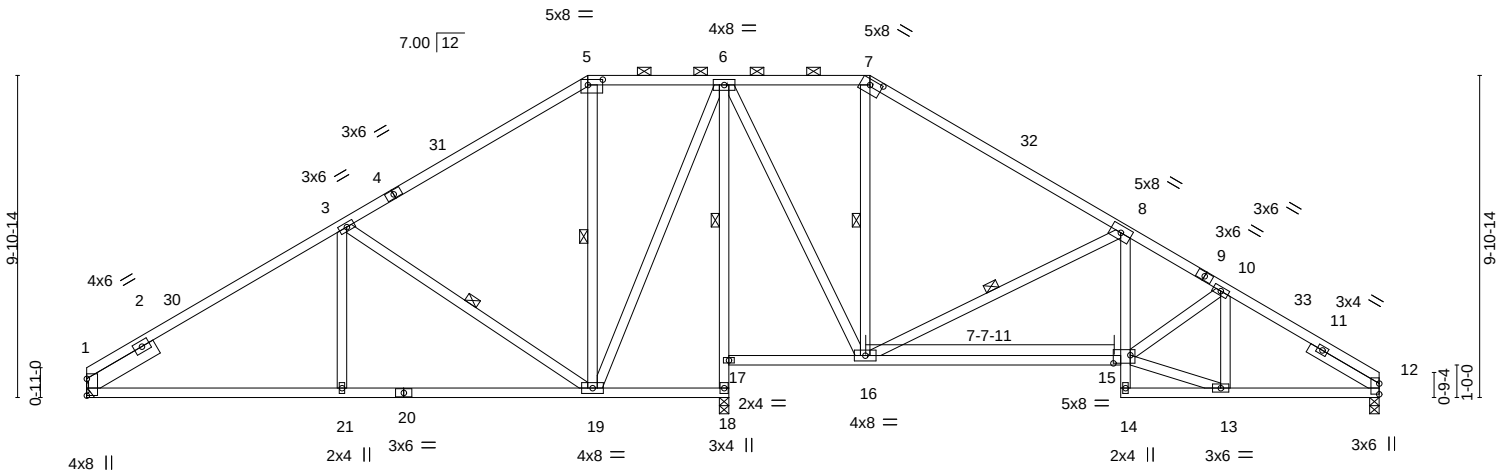
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	B5	PIGGYBACK BASE	1	1	I49351376
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:37:53 2021 Page 1
ID:sZNiC9?G94Kxezjx5JOhRWzDFsh-gxl9DqVnhNzjPHOPVRAMdB6N6El8MCI2HJOyzay75cS

7-10-3	15-4-15	19-9-0	24-1-1	31-9-10	35-0-4	39-9-0
7-10-3	7-6-11	4-4-1	4-4-1	7-8-9	3-2-10	4-8-12

Scale = 1:70.9



0-1-7	7-10-3	15-4-15	19-5-8	19-9-0	24-1-1	31-9-10	35-0-4	39-9-0
0-1-7	7-8-12	7-6-11	4-0-9	0-3-8	4-4-1	7-8-9	3-2-10	4-8-12

Plate Offsets (X,Y)-- [1:Edge,0-0-0], [5:0-5-8,0-2-0], [7:0-4-8,0-2-0], [12:Edge,0-0-0], [15:0-6-4,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.12	15-16	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.26	15-16	>931	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.34	Horz(CT)	-0.02	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 198 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x6 SPF No.2 2-6-0, Right 2x4 SPF No.2 2-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-9-2 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 4-2-10 oc bracing. Except:
1 Row at midpt 6-17
WEBS 1 Row at midpt 3-19, 5-19, 7-16, 8-16

REACTIONS. (size) 1=Mechanical, 18=0-3-8, 12=0-3-8
Max Horz 18=-239(LC 8)
Max Uplift 1=-211(LC 12), 18=-165(LC 12), 12=-247(LC 13)
Max Grav 1=861(LC 25), 18=1870(LC 1), 12=867(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1038/315, 3-5=-477/265, 5-6=-280/284, 6-7=-323/337, 7-8=-518/315, 8-10=-1247/450, 10-12=-1130/380
BOT CHORD 1-21=-160/864, 19-21=-160/864, 17-18=-1847/170, 6-17=-1814/179, 15-16=-277/1127, 8-15=-26/397, 12-13=-248/961
WEBS 3-21=0/320, 3-19=-738/293, 6-19=-161/825, 6-16=-129/860, 10-13=-254/96, 13-15=-207/970, 8-16=-926/350

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 15-4-15, Exterior(2R) 15-4-15 to 19-7-4, Interior(1) 19-7-4 to 24-1-1, Exterior(2R) 24-1-1 to 28-4-0, Interior(1) 28-4-0 to 39-9-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=211, 18=165, 12=247.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

December 21,2021

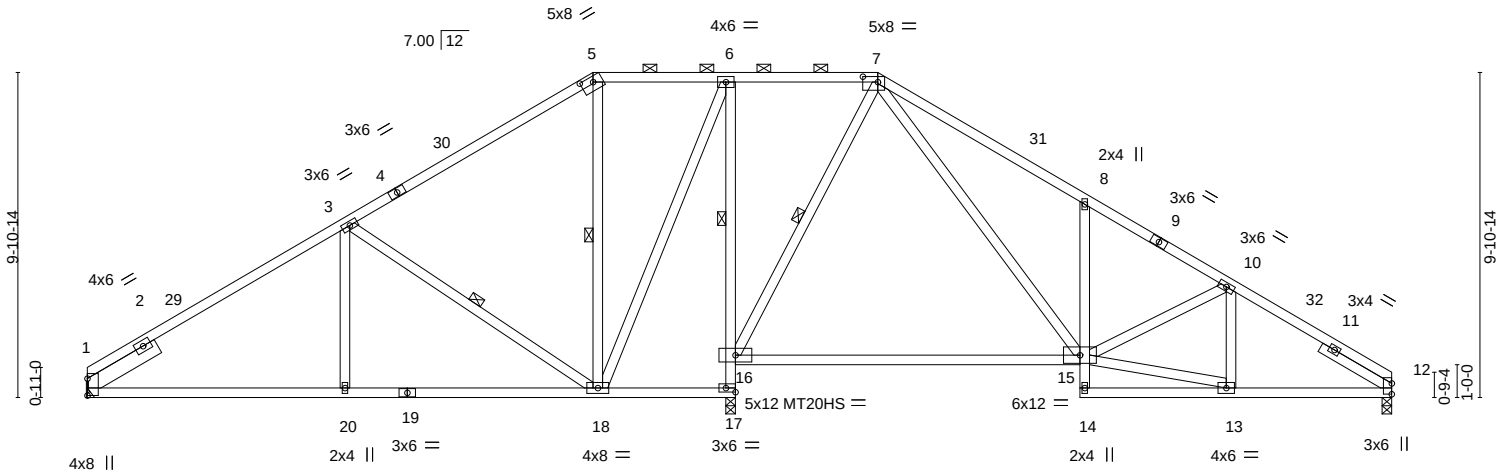
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	B6	Piggyback Base	3	1	I49351377
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:37:55 2021 Page 1
ID:sZNiC9?G94Kxezjx5JOhRWzDFsh-cKtwdWX1D_DRebYndsCqicBmX2PFq0eKldt31Ty75cQ

7-10-3	15-4-15	19-9-0	24-1-1	30-3-0	34-10-4	39-9-0
7-10-3	7-6-11	4-4-1	4-4-1	6-1-15	4-7-4	4-10-12

Scale = 1:70.2



0-1-2	7-10-3	15-4-15	19-5-8	19-9-0	24-1-1	30-3-0	34-10-4	39-9-0
0-1-2	7-9-1	7-6-11	4-0-9	0-3-8	4-4-1	6-1-15	4-7-4	4-10-12

Plate Offsets (X,Y)-- [1:Edge,0-0-0], [5:0-4-8,0-2-0], [7:0-5-8,0-2-0], [12:Edge,0-0-0], [17:Edge,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.31	15-16	>768	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.63	15-16	>381	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.02	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 195 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x6 SPF No.2 2-6-0, Right 2x4 SPF No.2 2-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (6-0-0 max.): 5-7.
BOT CHORD Rigid ceiling directly applied. Except:
1 Row at midpt 6-16
WEBS 1 Row at midpt 3-18, 5-18, 7-16

REACTIONS. (size) 1=Mechanical, 17=0-3-8, 12=0-3-8
Max Horz 17=-239(LC 8)
Max Uplift 1=-226(LC 12), 17=-137(LC 12), 12=-261(LC 13)
Max Grav 1=802(LC 25), 17=2005(LC 1), 12=801(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-931/338, 3-5=-368/291, 5-6=-186/309, 6-7=-37/319, 7-8=-1039/601, 8-10=-961/433, 10-12=-1029/406
BOT CHORD 1-20=-180/775, 18-20=-180/775, 17-18=-325/119, 16-17=-1989/145, 6-16=-1122/202, 8-15=-446/254, 12-13=-271/882
WEBS 3-20=0/326, 3-18=-744/287, 5-18=-313/56, 13-15=-198/935, 6-18=-153/915, 7-15=-336/1065, 7-16=-851/161

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 15-4-15, Exterior(2R) 15-4-15 to 19-7-4, Interior(1) 19-7-4 to 24-1-1, Exterior(2R) 24-1-1 to 28-4-0, Interior(1) 28-4-0 to 39-9-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=226, 17=137, 12=261.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

December 21,2021

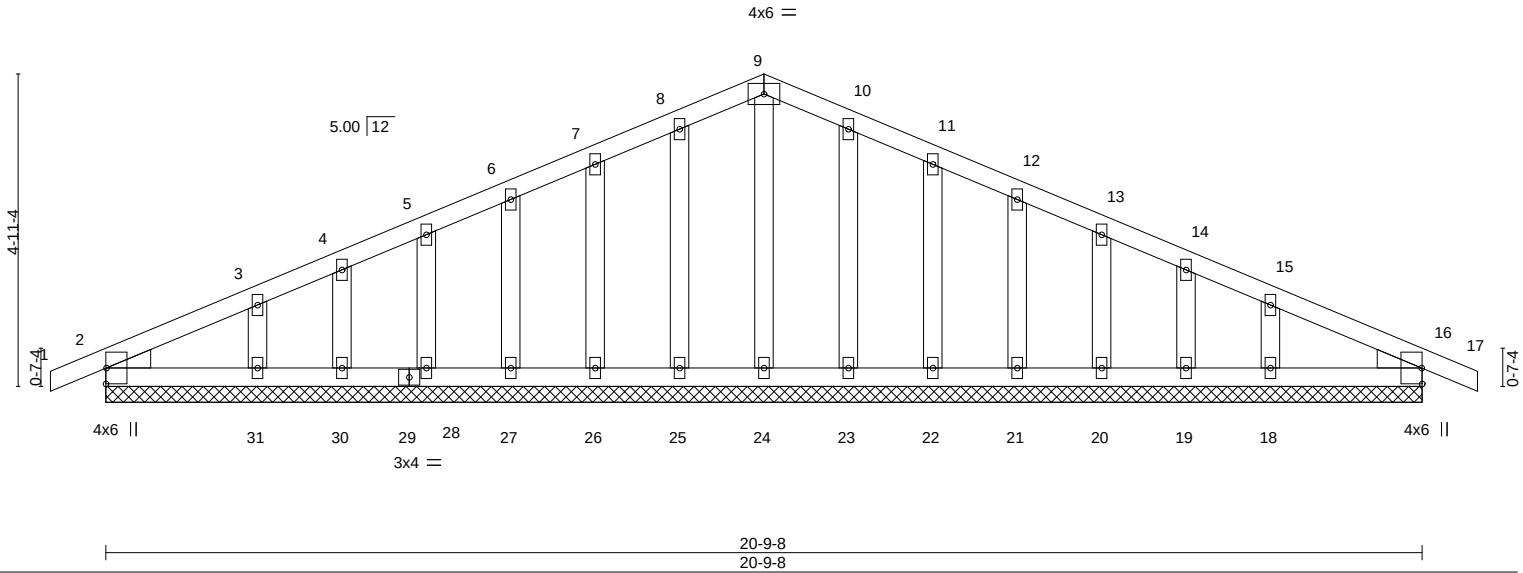
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	C1	Common Supported Gable	1	1	I49351378
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:37:56 2021 Page 1
ID:sZNiC9?G94Kxezjx5JOhRWzDFsh-4WRIrsYf_ILIGl7_Aaj3Fpk35SvKZdtU_HdcZvy75cP

0-10-8 10-4-12 20-9-8 21-8-0
0-10-8 10-4-12 10-4-12 0-10-8

Scale = 1:36.4



20-9-8
20-9-8

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	0.00	16	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	16	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	16	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 92 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2 , Right: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 20-9-8.
(lb) - Max Horz 2=83(LC 16)
Max Uplift All uplift 100 lb or less at joint(s) 2, 25, 26, 27, 28, 30, 31, 23, 22, 21, 20, 19, 18, 16
Max Grav All reactions 250 lb or less at joint(s) 2, 24, 25, 26, 27, 28, 30, 31, 23, 22, 21, 20, 19, 18, 16

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-4-12, Exterior(2N) 2-4-12 to 10-4-12, Corner(3R) 10-4-12 to 13-4-12, Exterior(2N) 13-4-12 to 21-8-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 1-4-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 25, 26, 27, 28, 30, 31, 23, 22, 21, 20, 19, 18, 16.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

December 21,2021

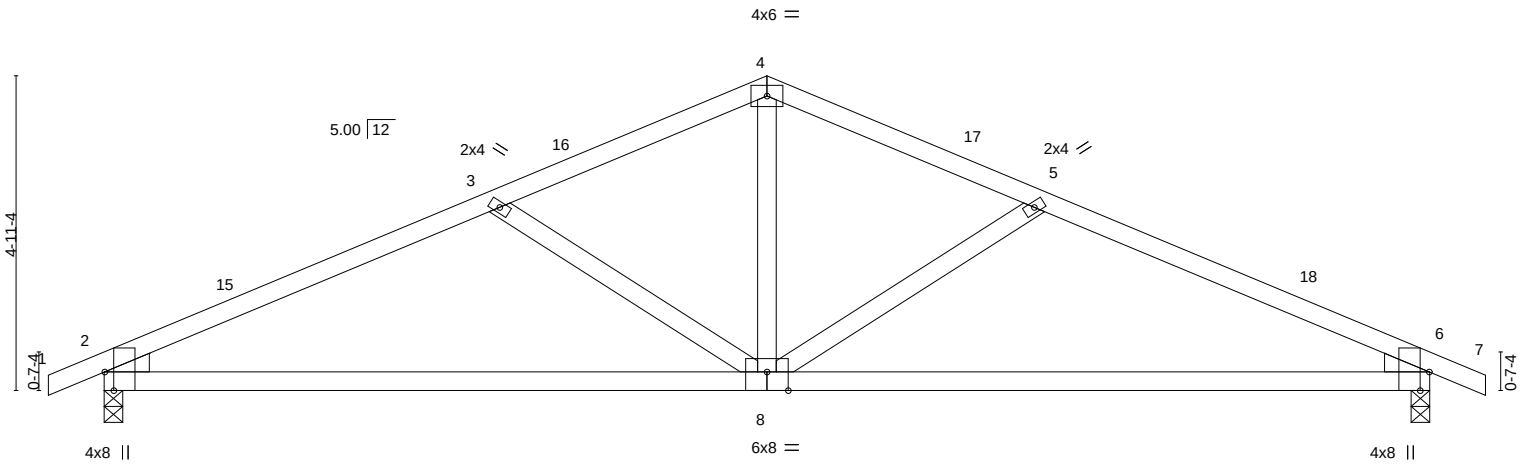
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	C2	Common	4	1	I49351379
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:37:57 2021 Page 1
ID:sZNiC9?G94KxezjxJOhRWzDFsh-Yj?g2CYHlcT9tuiAkHEIn0HA7r3nI1VdCxMA6Ly75cO

0-10-8	6-2-7	10-4-12	14-7-1	20-9-8	21-8-0
0-10-8	6-2-7	4-2-5	4-2-5	6-2-7	0-10-8

Scale = 1:36.1



10-4-12	20-9-8
10-4-12	10-4-12

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [6:0-3-8,Edge], [8:0-4-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.15	8-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.32	8-11	>785	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.04	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 70 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2 , Right: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=83(LC 12)
Max Uplift 2=-178(LC 12), 6=-178(LC 13)
Max Grav 2=997(LC 1), 6=997(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1622/390, 3-4=-1251/312, 4-5=-1251/312, 5-6=-1622/390
BOT CHORD 2-8=-274/1433, 6-8=-281/1433
WEBS 4-8=-108/643, 5-8=-434/205, 3-8=-434/205

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-4-12, Exterior(2R) 10-4-12 to 13-4-12, Interior(1) 13-4-12 to 21-8-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=178, 6=178.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

December 21,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	C3	Common Supported Gable	1	1	I49351380
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:37:58 2021 Page 1
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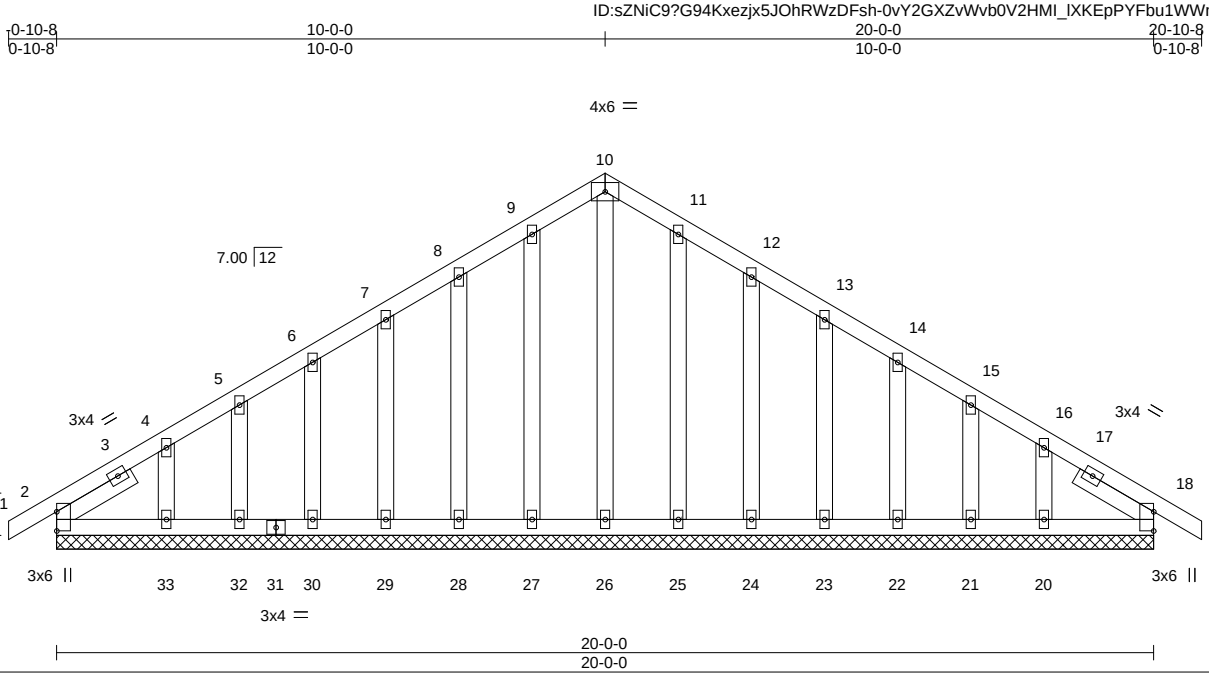

Plate Offsets (X,Y)-- [2:Edge,0-0-0], [18:Edge,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	-0.00	18	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	18	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	18	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 108 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 1-7-7, Right 2x4 SPF No.2 1-7-7

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 20-0-0.
(lb) - Max Horz 2=166(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 27, 28, 29, 30, 32, 25, 24, 23, 22, 21, 20, 18 except 33=-102(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 2, 26, 27, 28, 29, 30, 32, 33, 25, 24, 23, 22, 21, 20, 18

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-0-0, Exterior(2N) 2-0-0 to 10-0-0, Corner(3R) 10-0-0 to 13-0-0, Exterior(2N) 13-0-0 to 20-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 1-4-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 27, 28, 29, 30, 32, 25, 24, 23, 22, 21, 20, 18 except (jt=lb) 33=102.
9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 18.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

December 21,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	C4	Common	1	1	I49351381
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:37:59 2021 Page 1
ID:sZNiC9?G94Kxezjx5JOhRWzDFsh-U56RTtaXGDjs7CsZsiGmtRMWUfmgmxvwgFrHAEy75cM

0-10-8 5-1-12 10-0-0 14-10-4 20-0-0 20-10-8
0-10-8 5-1-12 4-10-4 4-10-4 5-1-12 0-10-8

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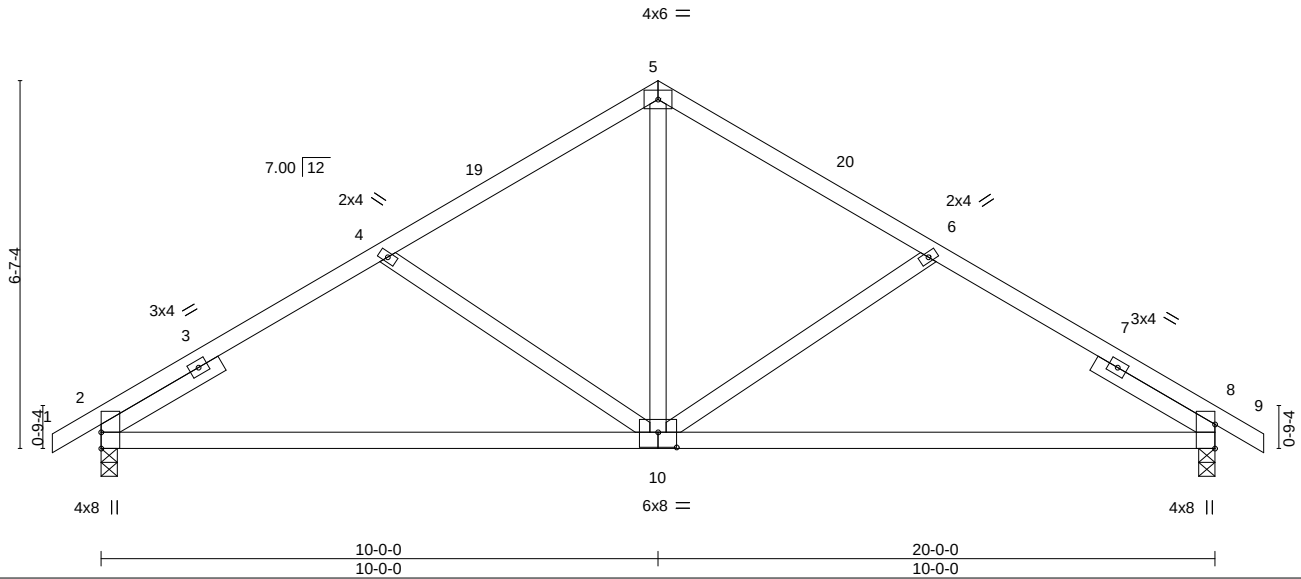

Plate Offsets (X,Y)-- [2:Edge,0-0-0], [8:Edge,0-0-0], [10:0-4-0,0-3-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	-0.13	10-17	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.27	10-17	>902	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 77 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 2-6-0, Right 2x4 SPF No.2 2-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=-166(LC 10)
Max Uplift 2=-163(LC 12), 8=-163(LC 13)
Max Grav 2=961(LC 1), 8=961(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1105/226, 4-5=-960/200, 5-6=-960/200, 6-8=-1105/226
BOT CHORD 2-10=-212/1001, 8-10=-113/1001
WEBS 5-10=-67/536, 6-10=-331/202, 4-10=-331/202

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-0-0, Exterior(2R) 10-0-0 to 13-0-0, Interior(1) 13-0-0 to 20-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=163, 8=163.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

December 21,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	C5	Common Supported Gable	1	1	I49351382
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:38:00 2021 Page 1
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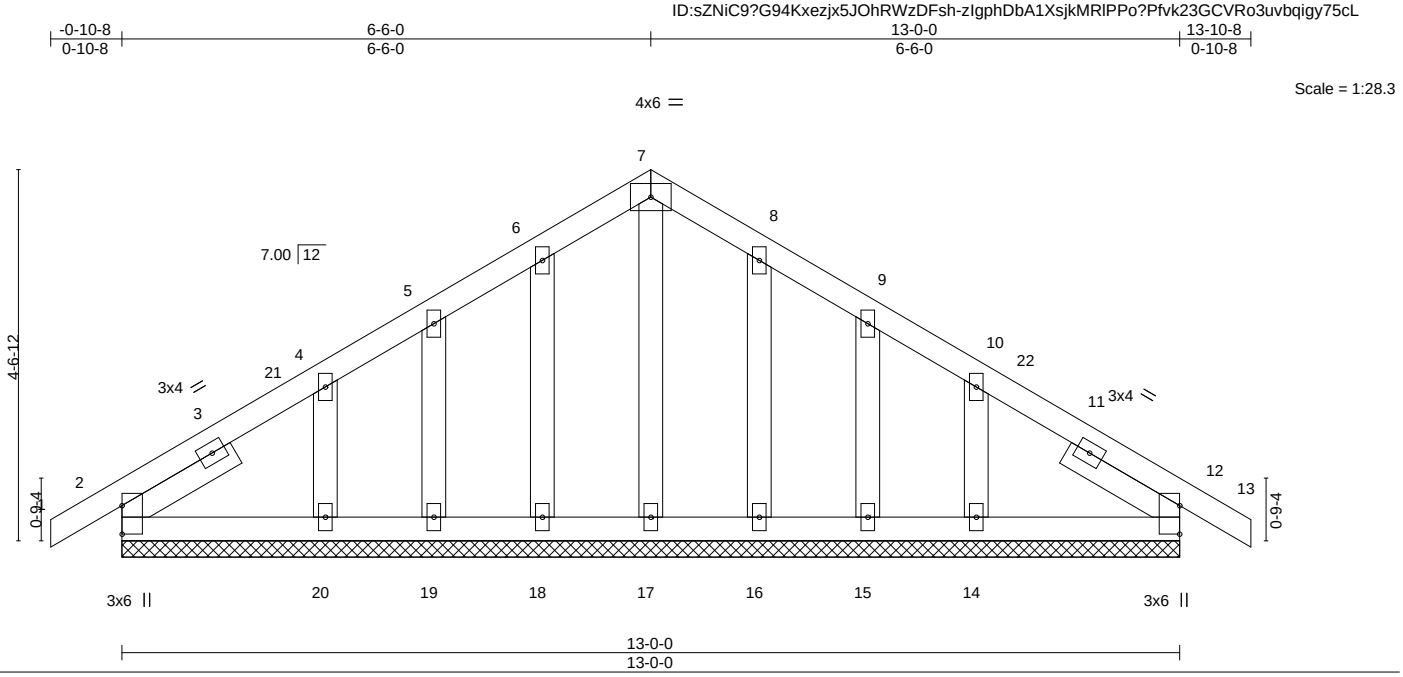

Plate Offsets (X,Y)-- [2:Edge,0-0-0], [12:Edge,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	0.00	12	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	12	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 60 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 1-7-5, Right 2x4 SPF No.2 1-7-5

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 13-0-0.
(lb) - Max Horz 2=-112(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 12, 18, 19, 20, 16, 15, 14
Max Grav All reactions 250 lb or less at joint(s) 2, 12, 17, 18, 19, 20, 16, 15, 14

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 6-6-0, Corner(3R) 6-6-0 to 9-6-0, Exterior(2N) 9-6-0 to 13-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 1-4-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12, 18, 19, 20, 16, 15, 14.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

December 21,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	G1	GABLE	1	2	I49351383
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:38:02 2021 Page 1
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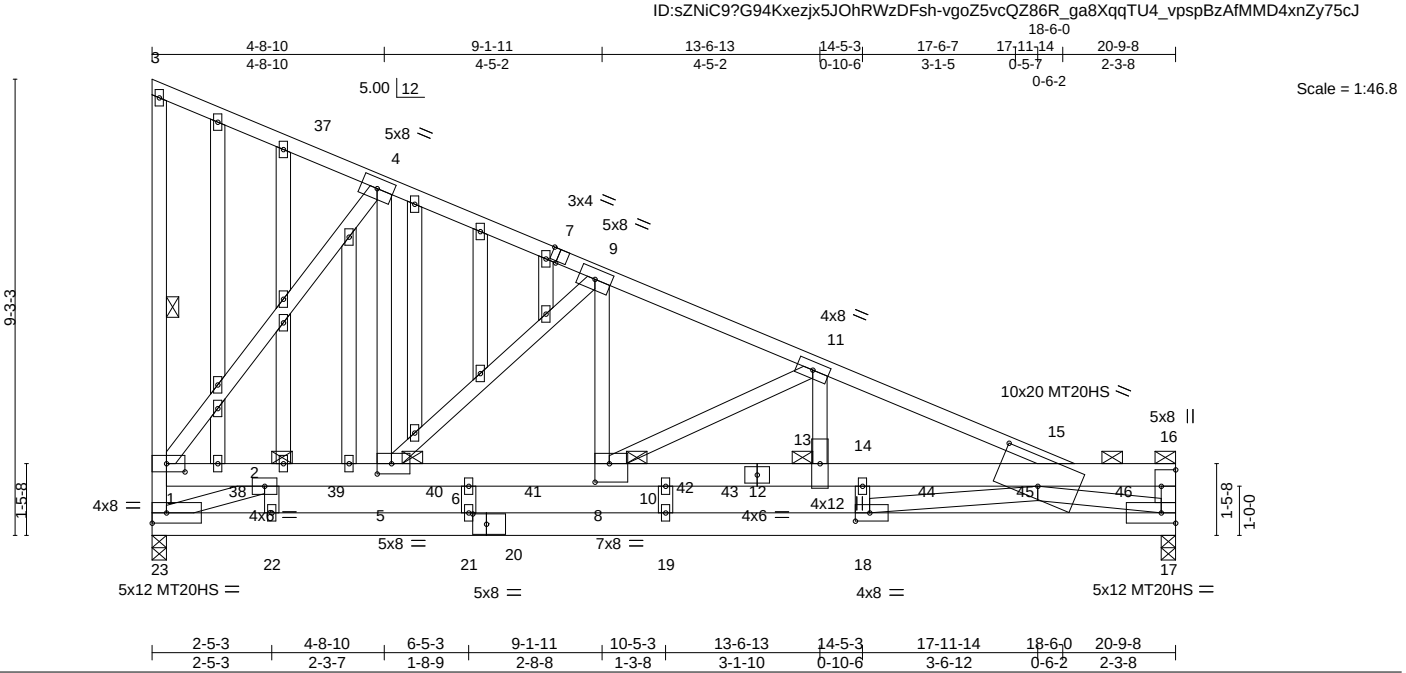

2-5-3	4-8-10	6-5-3	9-1-11	10-5-3	13-6-13	14-5-3	17-11-14	18-6-0	20-9-8
2-5-3	2-3-7	1-8-9	2-8-8	1-3-8	3-1-10	0-10-6	3-6-12	0-6-2	2-3-8

Plate Offsets (X,Y)-- [1:0-4-8,0-2-0], [5:0-3-8,0-2-8], [7:0-1-11,Edge], [8:0-3-8,0-4-8], [15:0-10-8,0-7-0], [16:Edge,0-3-8], [18:0-3-8,0-2-0], [20:0-3-5,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.03	18	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.28	18-19	>868	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	NO	WB	0.72	Horz(CT)	0.06	17	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 334 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 12-16: 2x6 SPF 2100F 1.8E
BOT CHORD	2x6 SPF 2100F 1.8E
WEBS	2x4 SPF No.2
OTHERS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-16.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 3-23
JOINTS	1 Brace at Jt(s): 16, 5, 8, 13, 2

REACTIONS. (size) 23=0-3-8, 17=0-3-8
Max Horz 23=-380(LC 10)
Max Grav 23=4582(LC 1), 17=4915(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	1-23=-2340/0, 4-9=-2068/0, 9-11=-5109/0, 11-15=-8420/0, 1-2=0/1507, 2-5=-4085/0, 5-6=-1322/0, 6-8=-1322/0, 8-10=0/1665, 10-13=0/1665, 13-14=0/1665, 14-15=0/1665, 15-16=-598/0, 16-17=-988/0
BOT CHORD	22-23=0/5939, 21-22=0/5939, 19-21=0/5939, 18-19=0/5939, 17-18=0/9111
WEBS	1-4=-3036/0, 4-5=0/2845, 5-9=-3811/0, 8-9=0/3464, 8-11=-3297/0, 11-13=0/2743, 2-22=0/578, 6-21=-389/0, 10-19=0/524, 14-18=0/609, 2-23=-6059/0, 15-17=-9294/0, 15-18=-3273/0

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x4 - 1 row at 0-4-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
   Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc.
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 17-15 2x4 - 1 row at 0-7-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 20-7-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
4) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable studs spaced at 1-4-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.

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Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) . The design/selection of such connection device(s) is the responsibility of others.
15) Studding applied to ply: 1(Front)

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 3-15=-70, 15-16=-70, 17-23=-20
   Concentrated Loads (lb)
   Vert: 13=-800(F) 38=-760(F) 39=-760(F) 40=-760(F) 41=-750(F) 42=-711(F) 43=-711(F) 44=-800(F) 45=-800(F) 46=-800(F)
2) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 3-15=-58, 15-16=-58, 17-23=-20
   Concentrated Loads (lb)
   Vert: 13=-800(F) 38=-760(F) 39=-760(F) 40=-760(F) 41=-750(F) 42=-711(F) 43=-711(F) 44=-800(F) 45=-800(F) 46=-800(F)
3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 3-15=-20, 15-16=-20, 17-23=-40
   Concentrated Loads (lb)
   Vert: 13=-800(F) 38=-760(F) 39=-760(F) 40=-760(F) 41=-750(F) 42=-711(F) 43=-711(F) 44=-800(F) 45=-800(F) 46=-800(F)
4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 3-37=30, 15-37=20, 15-16=20, 17-23=-8
   Horz: 3-23=20, 3-37=42, 15-37=32, 16-17=35
   Concentrated Loads (lb)
   Vert: 13=-800(F) 38=-760(F) 39=-760(F) 40=-760(F) 41=-750(F) 42=-711(F) 43=-711(F) 44=-800(F) 45=-800(F) 46=-800(F)
5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 3-15=20, 15-16=30, 17-23=-8
   Horz: 3-23=-35, 3-15=32, 16-17=-20
   Concentrated Loads (lb)
   Vert: 13=-800(F) 38=-760(F) 39=-760(F) 40=-760(F) 41=-750(F) 42=-711(F) 43=-711(F) 44=-800(F) 45=-800(F) 46=-800(F)
6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 3-15=-36, 15-16=-36, 17-23=-20
   Horz: 3-23=-23, 3-15=-16, 16-17=-32
   Concentrated Loads (lb)
   Vert: 13=-800(F) 38=-760(F) 39=-760(F) 40=-760(F) 41=-750(F) 42=-711(F) 43=-711(F) 44=-800(F) 45=-800(F) 46=-800(F)
7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 3-15=-36, 15-16=-36, 17-23=-20
   Horz: 3-23=32, 3-15=-16, 16-17=23
   Concentrated Loads (lb)
   Vert: 13=-800(F) 38=-760(F) 39=-760(F) 40=-760(F) 41=-750(F) 42=-711(F) 43=-711(F) 44=-800(F) 45=-800(F) 46=-800(F)
8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 3-15=15, 15-16=11, 17-23=-8
   Horz: 3-23=17, 3-15=27, 16-17=22
   Concentrated Loads (lb)
   Vert: 13=-800(F) 38=-760(F) 39=-760(F) 40=-760(F) 41=-750(F) 42=-711(F) 43=-711(F) 44=-800(F) 45=-800(F) 46=-800(F)
9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 3-15=17, 15-16=29, 17-23=-8
   Horz: 3-23=-22, 3-15=29, 16-17=-17
   Concentrated Loads (lb)
   Vert: 13=-800(F) 38=-760(F) 39=-760(F) 40=-760(F) 41=-750(F) 42=-711(F) 43=-711(F) 44=-800(F) 45=-800(F) 46=-800(F)
10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 3-15=-5, 15-16=-9, 17-23=-20
   Horz: 3-23=28, 3-15=15, 16-17=10
   Concentrated Loads (lb)
   Vert: 13=-800(F) 38=-760(F) 39=-760(F) 40=-760(F) 41=-750(F) 42=-711(F) 43=-711(F) 44=-800(F) 45=-800(F) 46=-800(F)
11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 3-15=-2, 15-16=9, 17-23=-20
   Horz: 3-23=-10, 3-15=18, 16-17=-28
   Concentrated Loads (lb)
   Vert: 13=-800(F) 38=-760(F) 39=-760(F) 40=-760(F) 41=-750(F) 42=-711(F) 43=-711(F) 44=-800(F) 45=-800(F) 46=-800(F)
12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 3-15=11, 15-16=11, 17-23=-8
   Horz: 3-23=14, 3-15=23, 16-17=20
   Concentrated Loads (lb)
   Vert: 13=-800(F) 38=-760(F) 39=-760(F) 40=-760(F) 41=-750(F) 42=-711(F) 43=-711(F) 44=-800(F) 45=-800(F) 46=-800(F)

Continued on page 3

LOAD CASE(S) Standard

13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 3-15=29, 15-16=29, 17-23=-8
Horz: 3-23=-20, 3-15=41, 16-17=-14
Concentrated Loads (lb)
Vert: 13=-800(F) 38=-760(F) 39=-760(F) 40=-760(F) 41=-750(F) 42=-711(F) 43=-711(F) 44=-800(F) 45=-800(F) 46=-800(F)

14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 3-15=6, 15-16=6, 17-23=-8
Horz: 3-23=7, 3-15=18, 16-17=15
Concentrated Loads (lb)
Vert: 13=-800(F) 38=-760(F) 39=-760(F) 40=-760(F) 41=-750(F) 42=-711(F) 43=-711(F) 44=-800(F) 45=-800(F) 46=-800(F)

15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 3-15=16, 15-16=16, 17-23=-8
Horz: 3-23=-15, 3-15=28, 16-17=-7
Concentrated Loads (lb)
Vert: 13=-800(F) 38=-760(F) 39=-760(F) 40=-760(F) 41=-750(F) 42=-711(F) 43=-711(F) 44=-800(F) 45=-800(F) 46=-800(F)

16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 3-15=-9, 15-16=-9, 17-23=-20
Horz: 3-23=26, 3-15=11, 16-17=8
Concentrated Loads (lb)
Vert: 13=-800(F) 38=-760(F) 39=-760(F) 40=-760(F) 41=-750(F) 42=-711(F) 43=-711(F) 44=-800(F) 45=-800(F) 46=-800(F)

17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 3-15=9, 15-16=9, 17-23=-20
Horz: 3-23=-8, 3-15=29, 16-17=-26
Concentrated Loads (lb)
Vert: 13=-800(F) 38=-760(F) 39=-760(F) 40=-760(F) 41=-750(F) 42=-711(F) 43=-711(F) 44=-800(F) 45=-800(F) 46=-800(F)

18) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
Uniform Loads (plf)
Vert: 3-15=-20, 15-16=-20, 17-23=-20
Concentrated Loads (lb)
Vert: 13=-800(F) 38=-760(F) 39=-760(F) 40=-760(F) 41=-750(F) 42=-711(F) 43=-711(F) 44=-800(F) 45=-800(F) 46=-800(F)

19) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 3-15=-46, 15-16=-49, 17-23=-20
Horz: 3-23=21, 3-15=11, 16-17=7
Concentrated Loads (lb)
Vert: 13=-800(F) 38=-760(F) 39=-760(F) 40=-760(F) 41=-750(F) 42=-711(F) 43=-711(F) 44=-800(F) 45=-800(F) 46=-800(F)

20) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 3-15=-44, 15-16=-36, 17-23=-20
Horz: 3-23=-7, 3-15=13, 16-17=-21
Concentrated Loads (lb)
Vert: 13=-800(F) 38=-760(F) 39=-760(F) 40=-760(F) 41=-750(F) 42=-711(F) 43=-711(F) 44=-800(F) 45=-800(F) 46=-800(F)

21) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 3-15=-49, 15-16=-49, 17-23=-20
Horz: 3-23=19, 3-15=9, 16-17=6
Concentrated Loads (lb)
Vert: 13=-800(F) 38=-760(F) 39=-760(F) 40=-760(F) 41=-750(F) 42=-711(F) 43=-711(F) 44=-800(F) 45=-800(F) 46=-800(F)

22) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 3-15=-36, 15-16=-36, 17-23=-20
Horz: 3-23=-6, 3-15=22, 16-17=-19
Concentrated Loads (lb)
Vert: 13=-800(F) 38=-760(F) 39=-760(F) 40=-760(F) 41=-750(F) 42=-711(F) 43=-711(F) 44=-800(F) 45=-800(F) 46=-800(F)

23) Dead + 0.6 C-C Wind Min. Down: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 3-15=-28, 15-16=-28, 17-23=-8
Horz: 3-23=-16, 3-15=-16, 16-17=-16
Concentrated Loads (lb)
Vert: 13=-800(F) 38=-760(F) 39=-760(F) 40=-760(F) 41=-750(F) 42=-711(F) 43=-711(F) 44=-800(F) 45=-800(F) 46=-800(F)

24) Dead + 0.6 C-C Wind Min. Upward: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 3-15=4, 15-16=4, 17-23=-8
Horz: 3-23=16, 3-15=16, 16-17=16
Concentrated Loads (lb)
Vert: 13=-800(F) 38=-760(F) 39=-760(F) 40=-760(F) 41=-750(F) 42=-711(F) 43=-711(F) 44=-800(F) 45=-800(F) 46=-800(F)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	G2	ROOF SPECIAL GIRDER	1	2	I49351384
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:38:03 2021 Page 1
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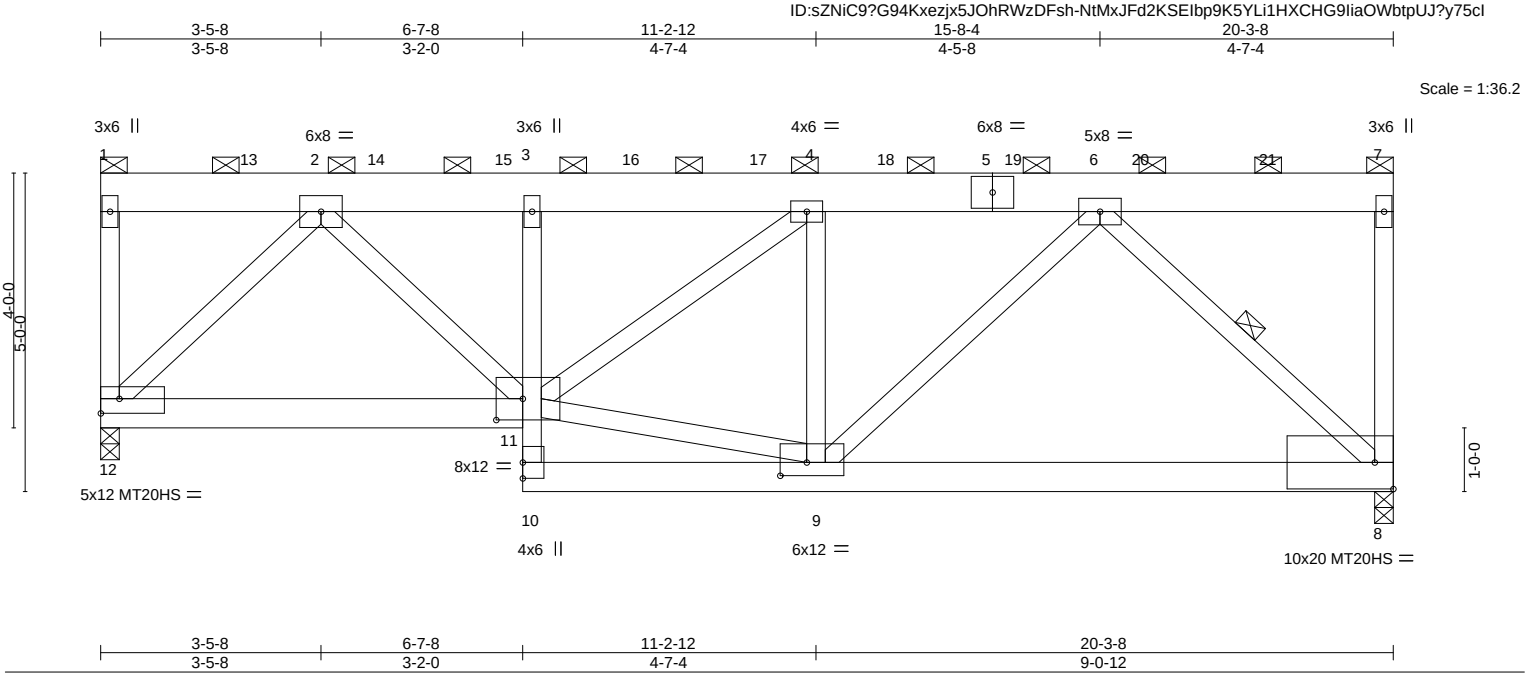

Plate Offsets (X,Y)-- [9:0-5-0,0-2-8], [11:0-5-0,0-4-0], [12:Edge,0-2-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	-0.09	3	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.16	3	>999	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	NO	WB	0.94	Horz(CT)	0.06	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 321 lb	FT = 20%

LUMBER-
TOP CHORD 2x8 SP 2400F 2.0E
BOT CHORD 2x6 SP 2400F 2.0E *Except*
3-10: 2x4 SPF No.2
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-7, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-8

REACTIONS. (size) 12=0-3-8, 8=0-3-8
Max Horz 12=161(LC 7)
Max Uplift 12=-1138(LC 4), 8=-1221(LC 5)
Max Grav 12=7106(LC 1), 8=7101(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-12=-1345/221, 2-3=-8991/1482, 3-4=-8943/1476, 4-6=-8333/1399, 7-8=-926/201
BOT CHORD 11-12=-986/5418, 3-11=-2356/424, 9-10=-180/921, 8-9=-1092/6092
WEBS 2-12=-7771/1299, 2-11=-848/5174, 9-11=-1296/7685, 4-11=-133/652, 4-9=-3943/731, 6-9=-481/3213, 6-8=-8565/1489

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=1138, 8=1221.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1009 lb down and 154 lb up at 0-1-12, 981 lb down and 153 lb up at 2-4-4, 981 lb down and 153 lb up at 4-4-4, 979 lb down and 152 lb up at 6-4-4, 1404 lb down and 252 lb up at 8-4-4, 1420 lb down and 245 lb up at 10-4-4, 1420 lb down and 245 lb up at 12-4-4, 1404 lb down and 252 lb up at 14-4-4, 1404 lb down and 252 lb up at 16-4-4, and 1404 lb down and 252 lb up at 18-4-4, and 8 lb down and 27 lb up at 20-1-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-7=-70, 11-12=-20, 8-10=-20
   Concentrated Loads (lb)
   Vert: 1=-1009 7=-1 13=-981 14=-981 15=-979 16=-1404 17=-1420 18=-1420 19=-1404 20=-1404 21=-1404

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	PB1	GABLE	1	1	I49351385
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:38:04 2021 Page 1
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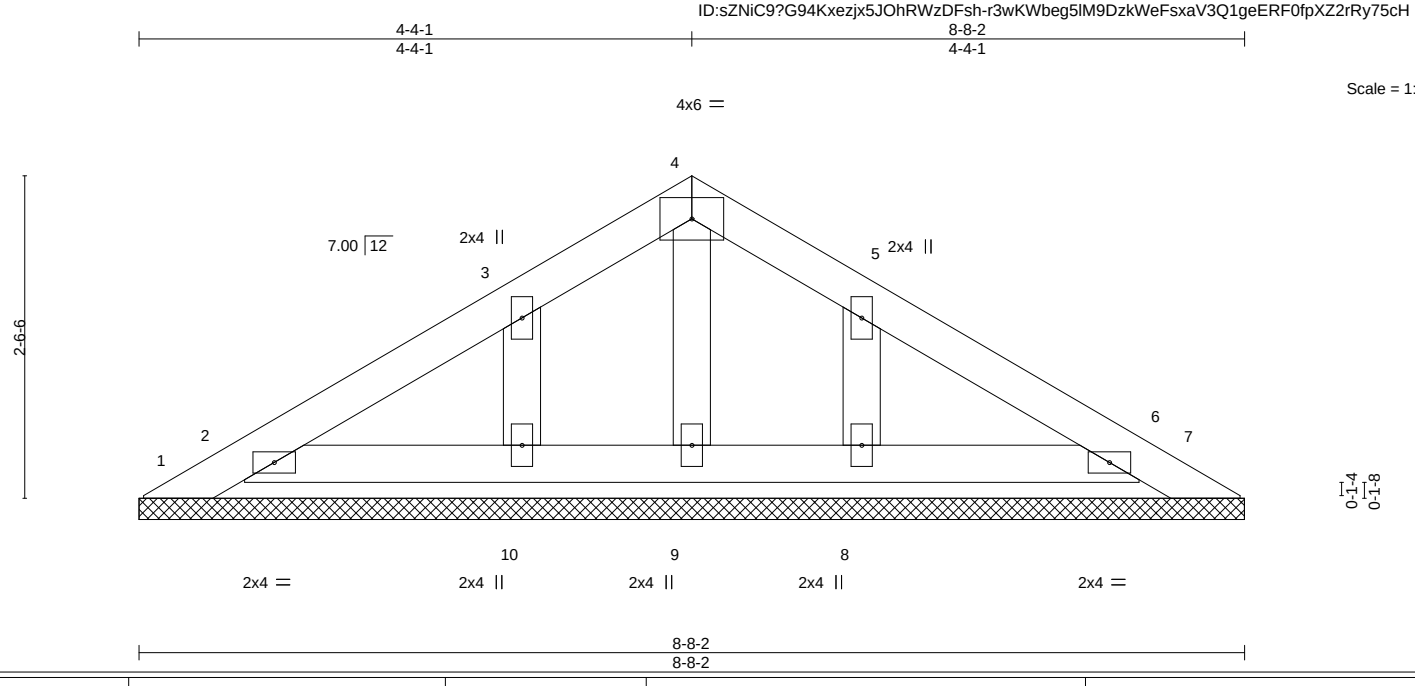

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 24 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 8-8-2.
(lb) - Max Horz 1=-61(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 2, 6, 10, 8
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 2, 6, 9, 10, 8

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-11 to 3-3-11, Interior(1) 3-3-11 to 4-4-1, Exterior(2R) 4-4-1 to 7-4-1, Interior(1) 7-4-1 to 8-4-7 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 1-4-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 2, 6, 10, 8.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	PB3	Piggyback	9	1	I49351386
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:38:05 2021 Page 1
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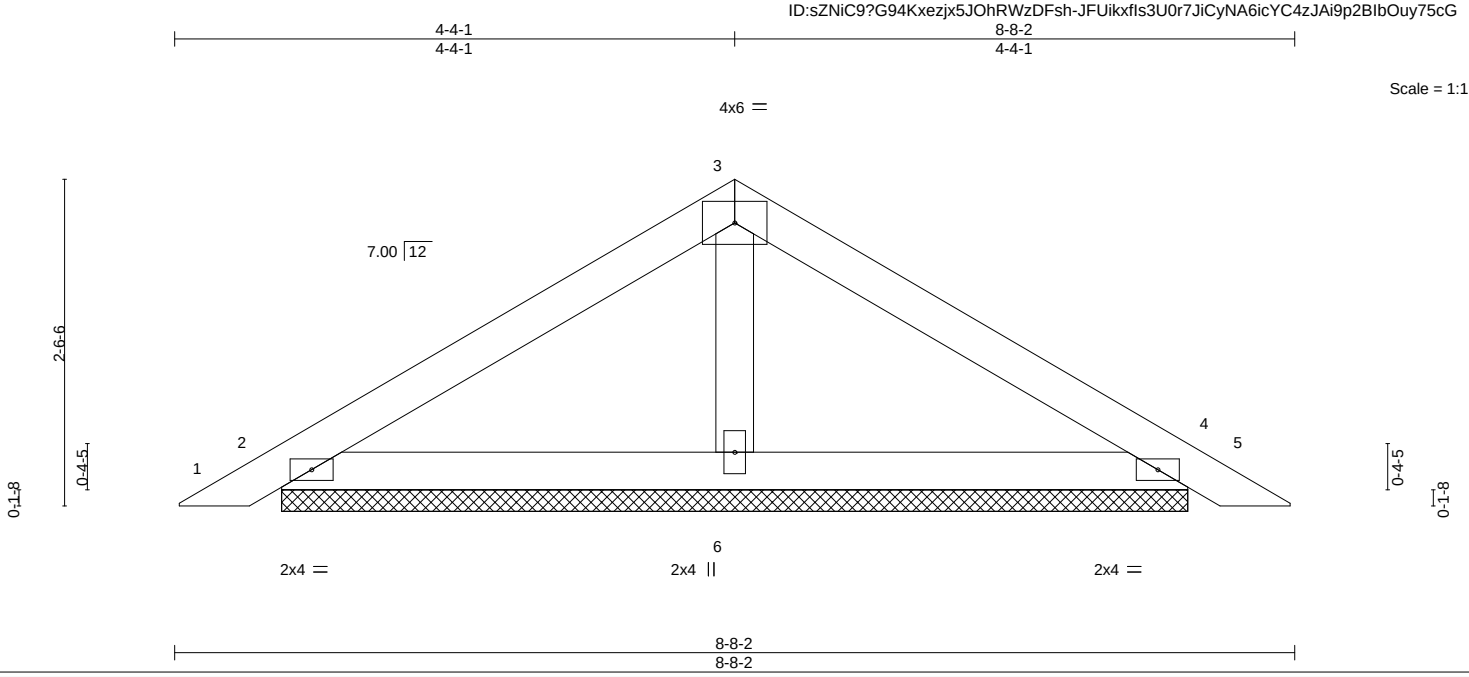

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	0.01	5	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	0.01	5	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 21 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=7-0-4, 4=7-0-4, 6=7-0-4
Max Horz 2=-61(LC 10)
Max Uplift 2=-56(LC 12), 4=-64(LC 13), 6=-15(LC 12)
Max Grav 2=205(LC 1), 4=205(LC 1), 6=295(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-11 to 3-3-11, Interior(1) 3-3-11 to 4-4-1, Exterior(2R) 4-4-1 to 7-4-1, Interior(1) 7-4-1 to 8-4-7 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4, 6.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	PB4	GABLE	2	1	I49351387
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:38:06 2021 Page 1
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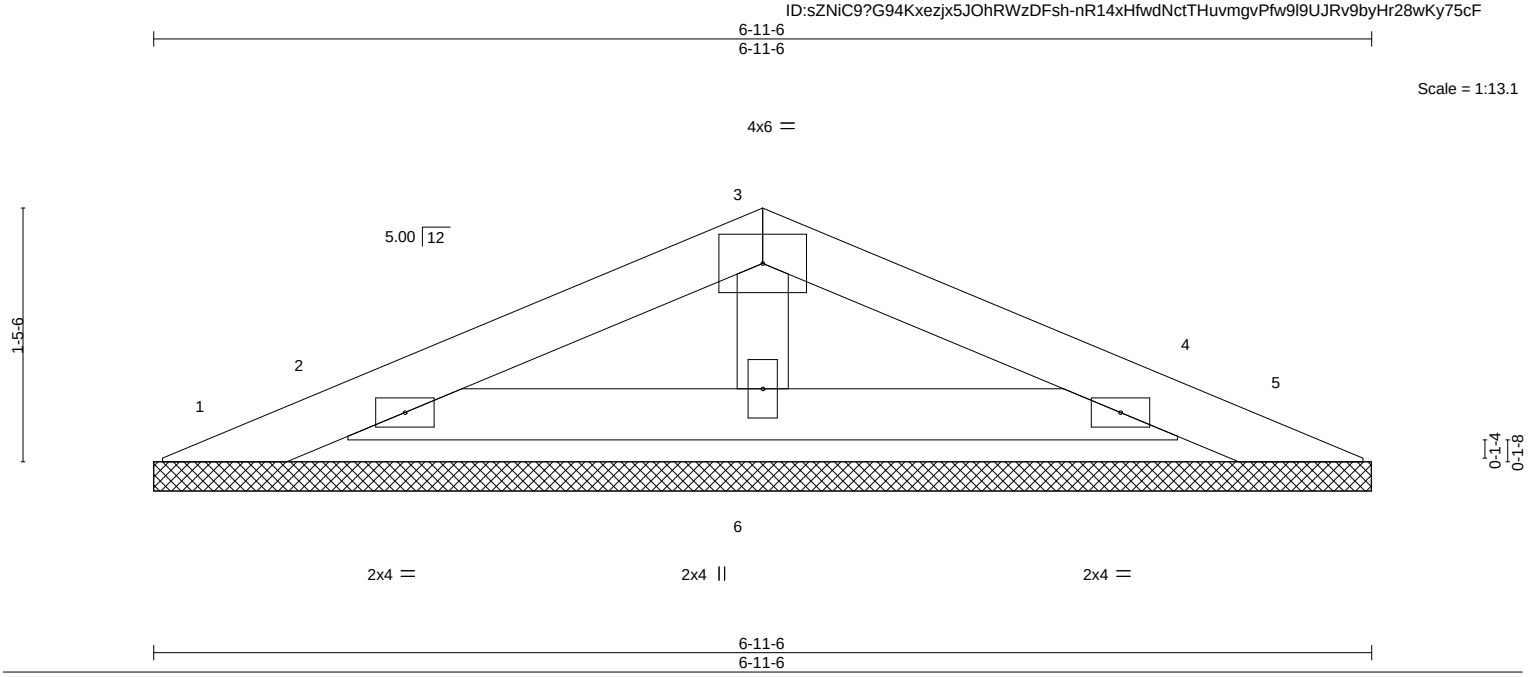

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 15 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 6-11-6.
(lb) - Max Horz 1=23(LC 16)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 2, 4, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 2, 4, 6

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 1-4-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 2, 4, 6.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	PB5	Piggyback	19	1	I49351388
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:38:06 2021 Page 1
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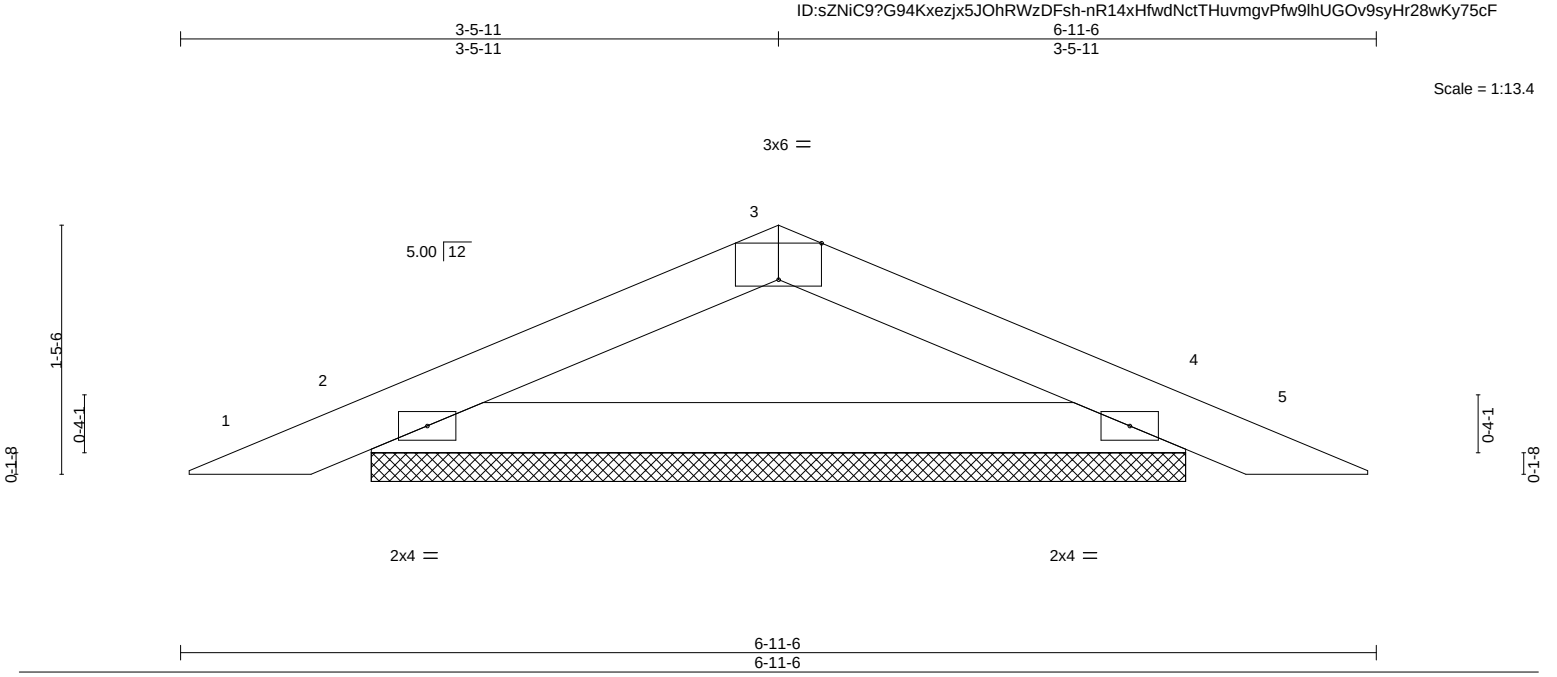

Plate Offsets (X,Y)-- [3:0-3-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	0.00	5	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	0.00	5	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 14 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=4-8-13, 4=4-8-13
Max Horz 2=-23(LC 13)
Max Uplift 2=-53(LC 12), 4=-53(LC 13)
Max Grav 2=262(LC 1), 4=262(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

December 21,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	V1	Valley	1	1	I49351389
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:38:07 2021 Page 1
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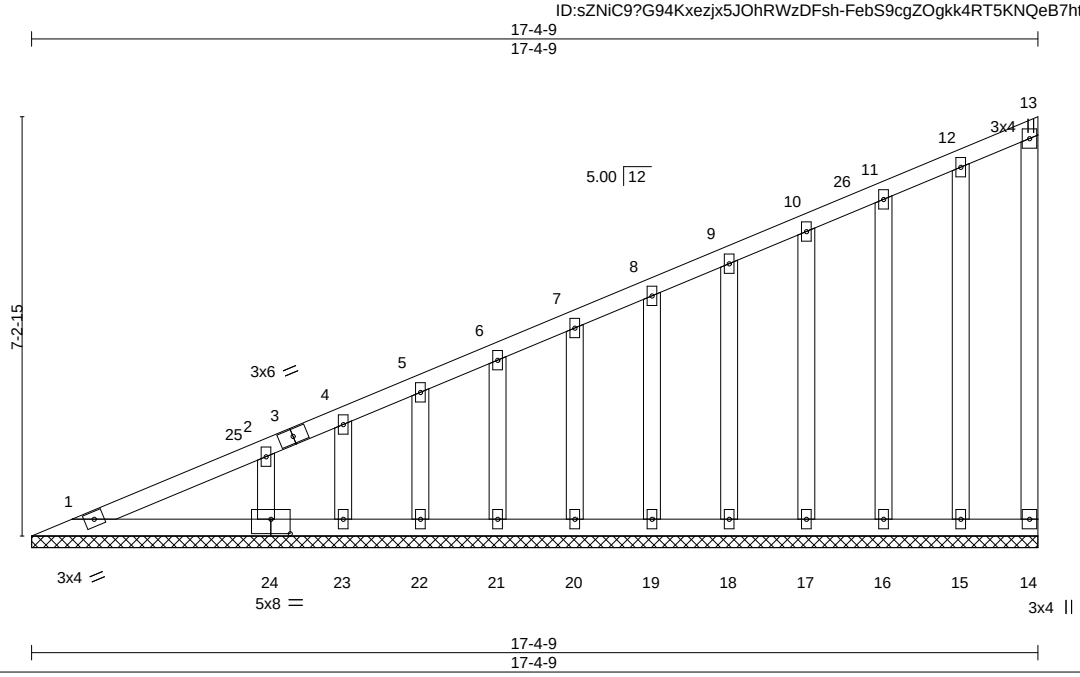

Plate Offsets (X,Y)-- [24:0-4-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	-0.00	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 90 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 17-4-9.
(lb) - Max Horz 1=300(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24
Max Grav All reactions 250 lb or less at joint(s) 14, 1, 15, 16, 17, 18, 19, 20, 21, 22, 23 except 24=309(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-440/218, 2-4=-375/187, 4-5=-360/191, 5-6=-326/179, 6-7=-296/170, 7-8=-265/161

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-8-12 to 3-8-12, Exterior(2N) 3-8-12 to 17-2-13 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable studs spaced at 1-4-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24.
7) N/A
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

December 21,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	V2	Valley	1	1	I49351390
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:38:11 2021 Page 1
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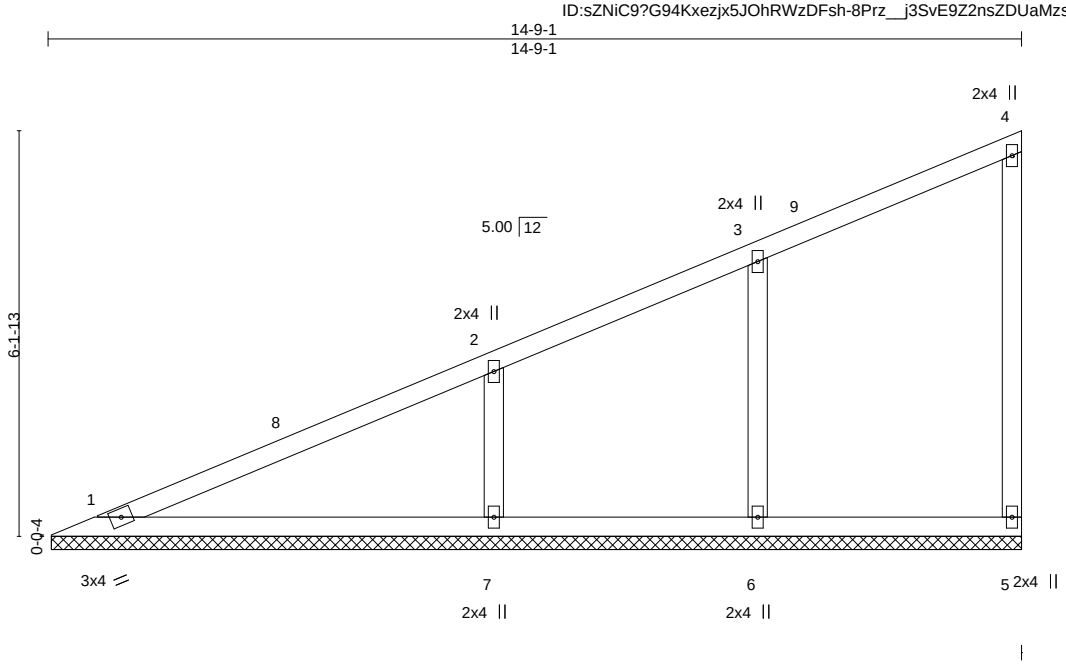

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	-0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 47 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
OTHERS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 14-8-8.
(lb) - Max Horz 1=253(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 5, 6 except 7=-169(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=315(LC 1), 7=552(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-307/190
WEBS 3-6=-252/166, 2-7=-413/241

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 14-7-5 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6 except (jt=lb) 7=169.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	V3	Valley	1	1	I49351391
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:38:12 2021 Page 1
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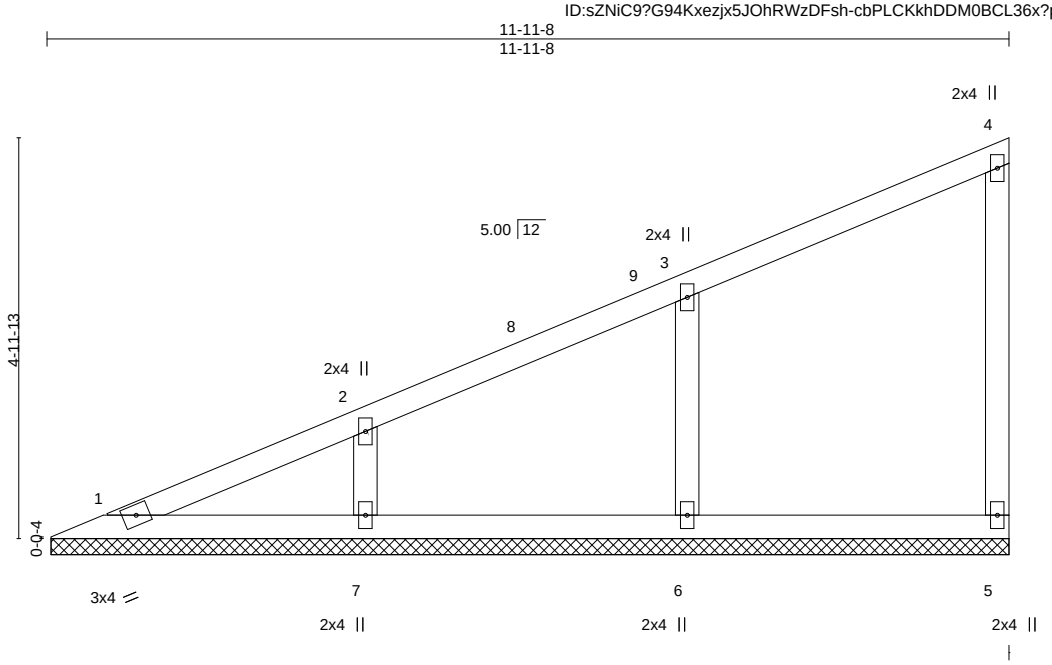

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	-0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 37 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 11-10-14.
(lb) - Max Horz 1=202(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 5, 6 except 7=-106(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=386(LC 1), 7=354(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-258/163
WEBS 3-6=-302/200, 2-7=-270/163

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-9-1 to 3-11-8, Interior(1) 3-11-8 to 11-9-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6 except (jt=lb) 7=106.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	V4	Valley	1	1	I49351392
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:38:12 2021 Page 1
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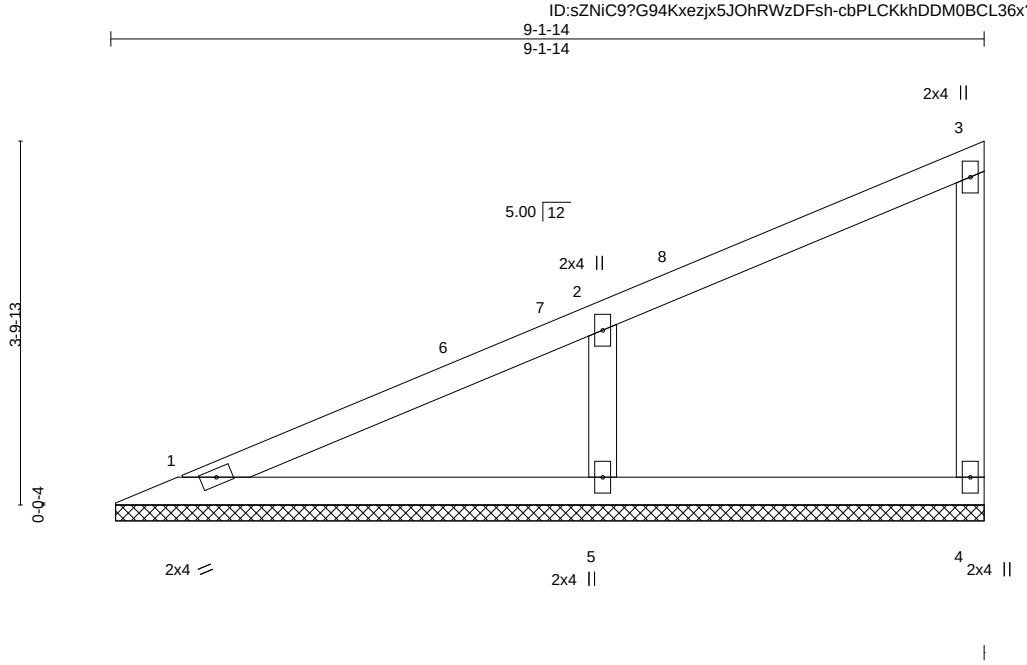

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 26 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
OTHERS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=9-1-5, 4=9-1-5, 5=9-1-5
Max Horz 1=151(LC 9)
Max Uplift 1=-8(LC 12), 4=-28(LC 9), 5=-120(LC 12)
Max Grav 1=159(LC 1), 4=128(LC 1), 5=456(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-347/243

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 9-0-2 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4 except (jt=lb) 5=120.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

December 21,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	V5	Valley	1	1	I49351393
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:38:13 2021 Page 1
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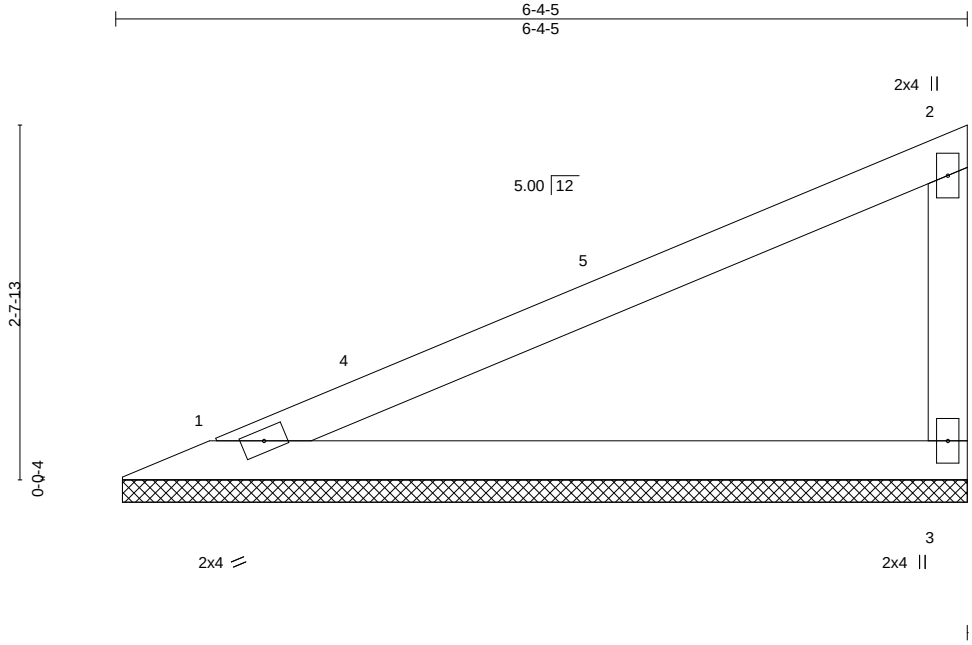

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 16 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=6-3-11, 3=6-3-11
Max Horz 1=100(LC 9)
Max Uplift 1=-43(LC 12), 3=-68(LC 12)
Max Grav 1=246(LC 1), 3=246(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 6-2-9 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	V6	Valley	1	1	I49351394
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:38:13 2021 Page 1
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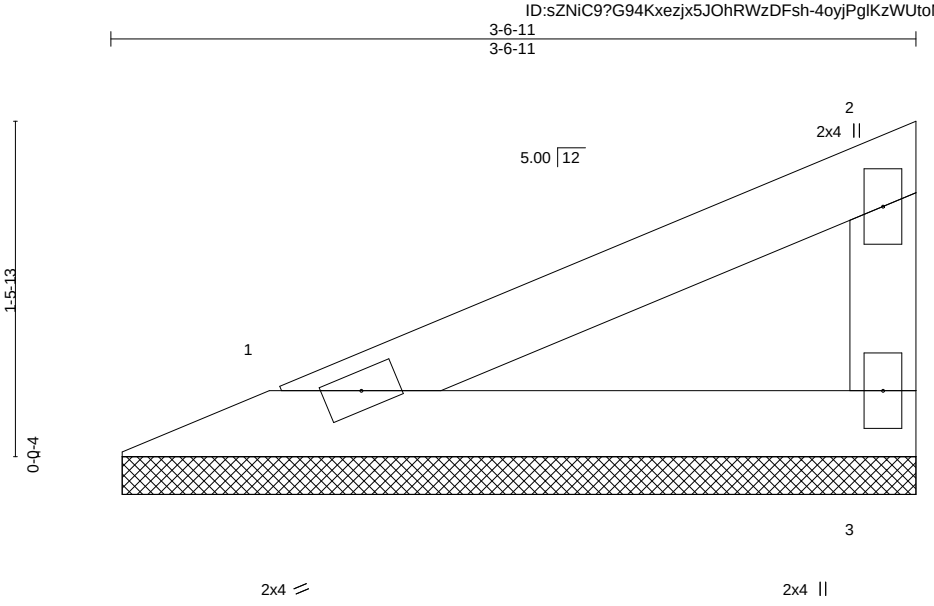

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 8 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-6-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-6-1, 3=3-6-1
Max Horz 1=49(LC 9)
Max Uplift 1=-22(LC 12), 3=-32(LC 12)
Max Grav 1=120(LC 1), 3=120(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

December 21,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	V7	Valley	1	1	I49351395
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:38:14 2021 Page 1
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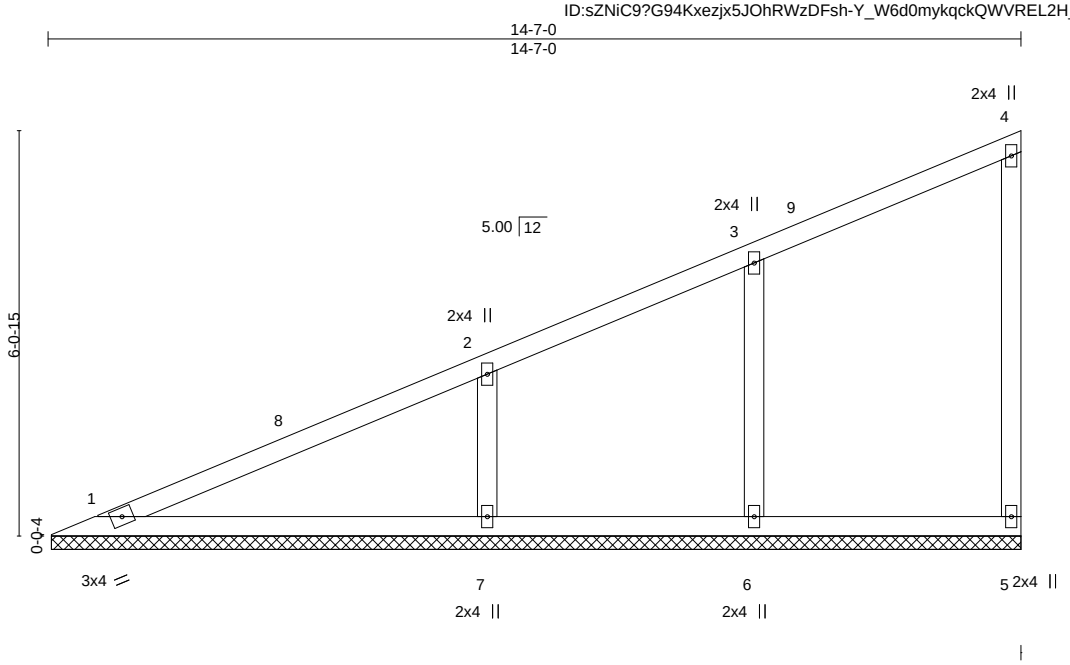

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	-0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 47 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
OTHERS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 14-6-6.
(lb) - Max Horz 1=249(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 5, 6 except 7=-164(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=322(LC 1), 7=537(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-305/188
WEBS 3-6=-257/169, 2-7=-403/236

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 14-5-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6 except (jt=lb) 7=164.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

December 21,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	V8	Valley	1	1	I49351396
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:38:14 2021 Page 1
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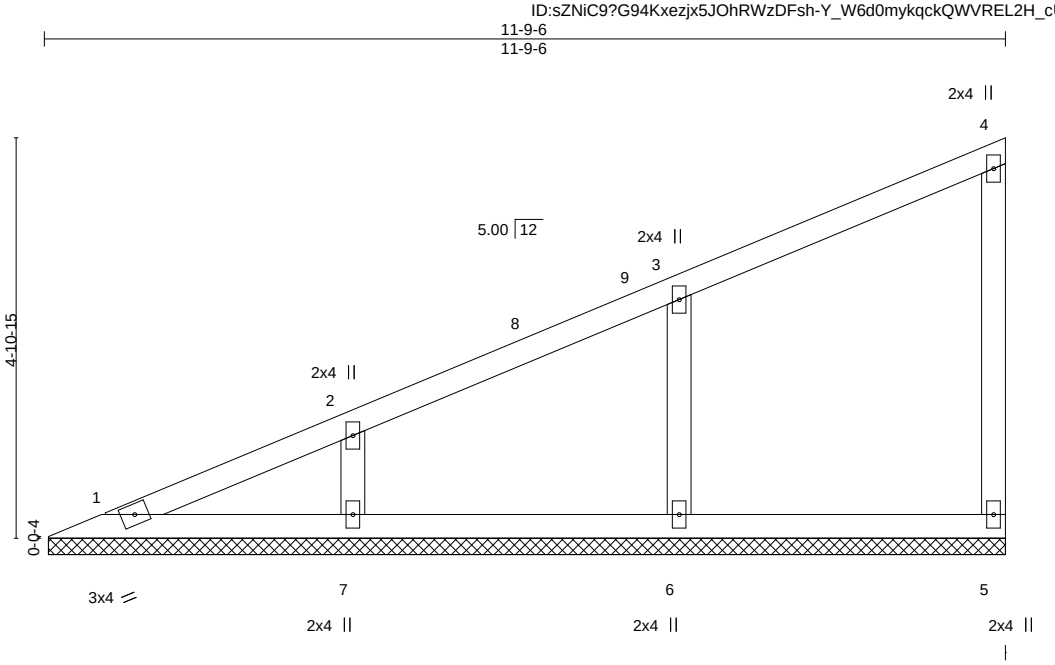

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	-0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 36 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
OTHERS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 11-8-13.
(lb) - Max Horz 1=199(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 5, 6 except 7=-105(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=389(LC 1), 7=344(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-256/162
WEBS 3-6=-304/202, 2-7=-263/159

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-9-1 to 3-9-6, Interior(1) 3-9-6 to 11-7-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6 except (jt=lb) 7=105.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	V9	Valley	1	1	I49351397
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:38:15 2021 Page 1
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8-11-13
8-11-13

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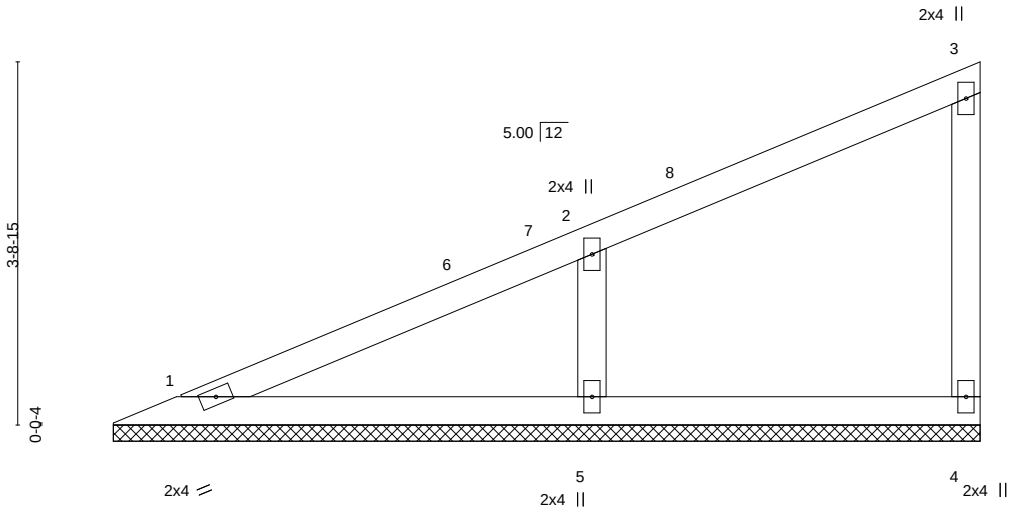

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 26 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
OTHERS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=8-11-3, 4=8-11-3, 5=8-11-3
Max Horz 1=148(LC 9)
Max Uplift 1=-6(LC 12), 4=-28(LC 9), 5=-120(LC 12)
Max Grav 1=147(LC 1), 4=126(LC 1), 5=455(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-354/252

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 8-10-1 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4 except (jt=lb) 5=120.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	V10	Valley	1	1	I49351398
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:38:08 2021 Page 1
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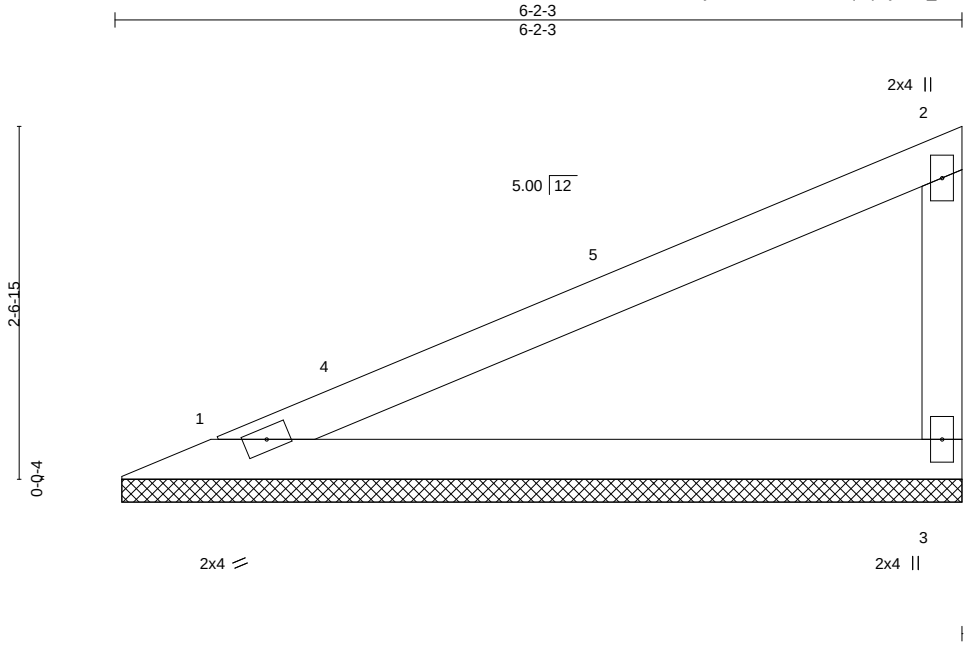

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 16 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=6-1-9, 3=6-1-9
Max Horz 1=97(LC 9)
Max Uplift 1=-44(LC 12), 3=-64(LC 12)
Max Grav 1=238(LC 1), 3=238(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 6-0-7 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	V11	Valley	1	1	I49351399
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:38:08 2021 Page 1
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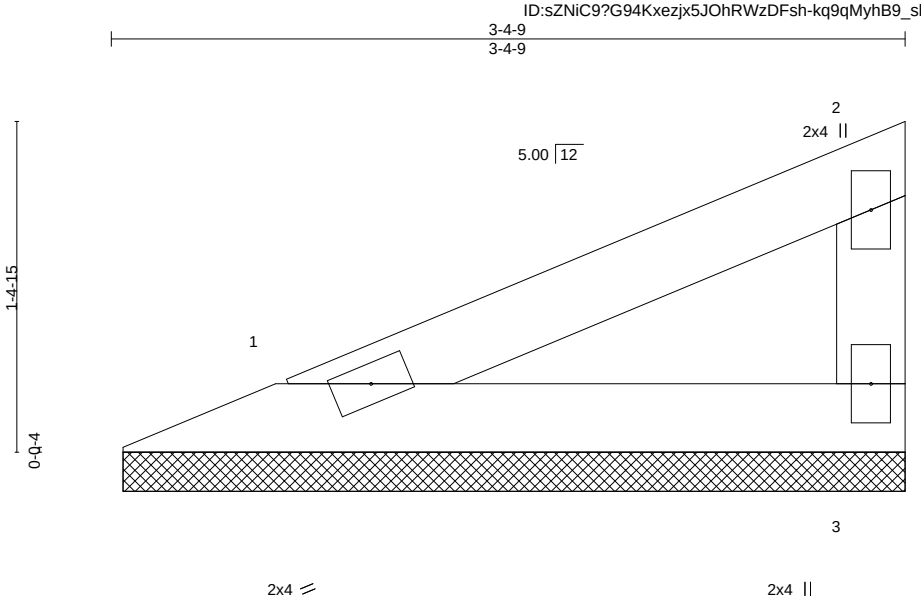

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 8 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-4-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-4-0, 3=3-4-0
Max Horz 1=46(LC 9)
Max Uplift 1=-21(LC 12), 3=-30(LC 12)
Max Grav 1=112(LC 1), 3=112(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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MiTek
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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	V12	Valley	1	1	I49351400
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:38:09 2021 Page 1
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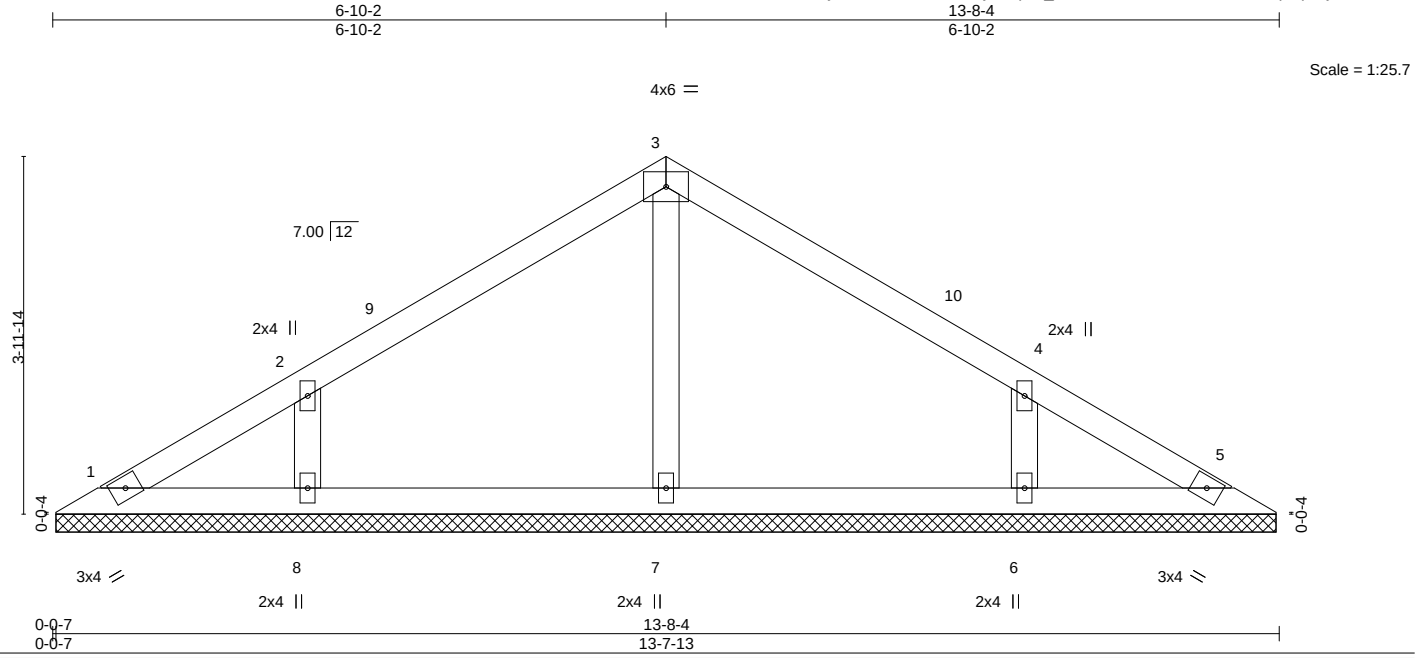

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 39 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 13-7-6.
(lb) - Max Horz 1=-96(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-138(LC 12), 6=-137(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=310(LC 1), 8=351(LC 19), 6=351(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-281/167, 4-6=-281/166

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 6-10-2, Exterior(2R) 6-10-2 to 9-10-2, Interior(1) 9-10-2 to 13-1-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=138, 6=137.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	V13	Valley	1	1	I49351401
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:38:10 2021 Page 1
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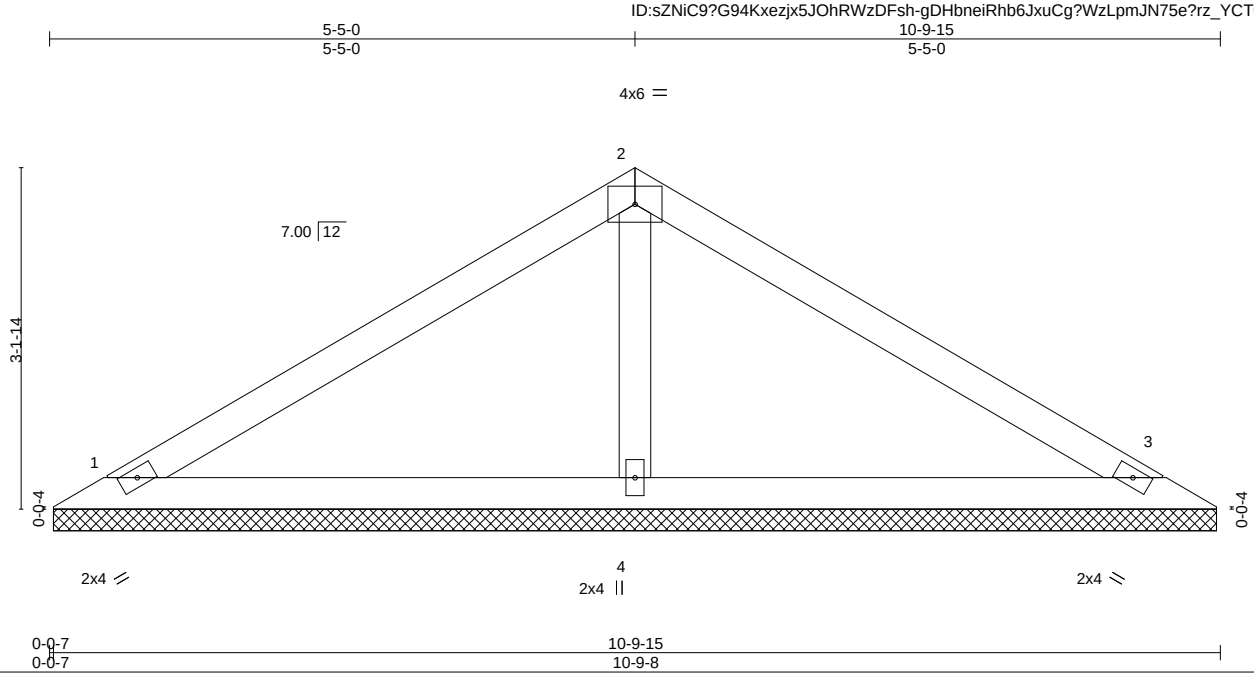

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 28 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=10-9-1, 3=10-9-1, 4=10-9-1
Max Horz 1=-74(LC 8)
Max Uplift 1=-47(LC 12), 3=-57(LC 13), 4=-47(LC 12)
Max Grav 1=208(LC 25), 3=208(LC 26), 4=462(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-314/125

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 5-5-0, Exterior(2R) 5-5-0 to 8-5-0, Interior(1) 8-5-0 to 10-3-7 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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16023 Swingley Ridge Rd
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Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #83/MO
3022528	V14	Valley	1	1	I49351402
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 10:38:10 2021 Page 1
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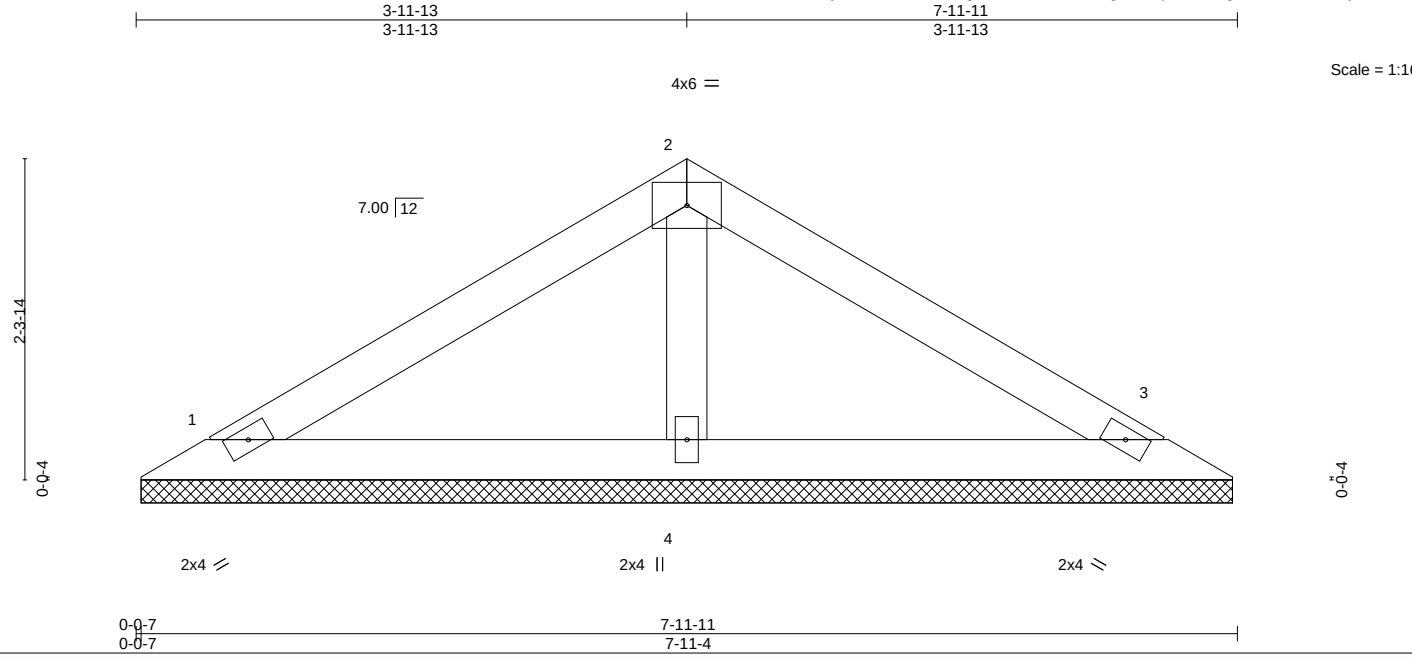

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 20 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=7-10-13, 3=7-10-13, 4=7-10-13
Max Horz 1=-53(LC 8)
Max Uplift 1=-41(LC 12), 3=-48(LC 13), 4=-18(LC 12)
Max Grav 1=163(LC 1), 3=163(LC 1), 4=295(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 3-11-13, Exterior(2R) 3-11-13 to 6-11-13 , Interior(1) 6-11-13 to 7-5-3 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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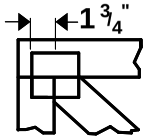
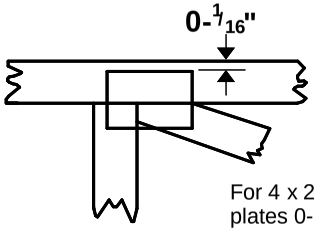
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

This symbol indicates the required direction of slots in connector plates.

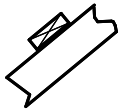
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

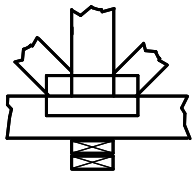
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING

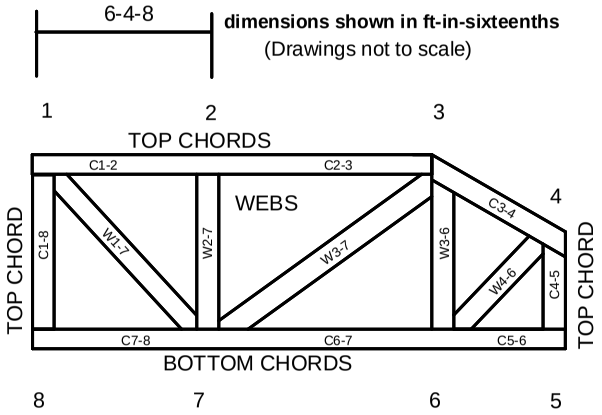


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.

21.The design does not take into account any dynamic or other loads other than those expressly stated.